american
VOCATIONAL
journal

MAY 1961

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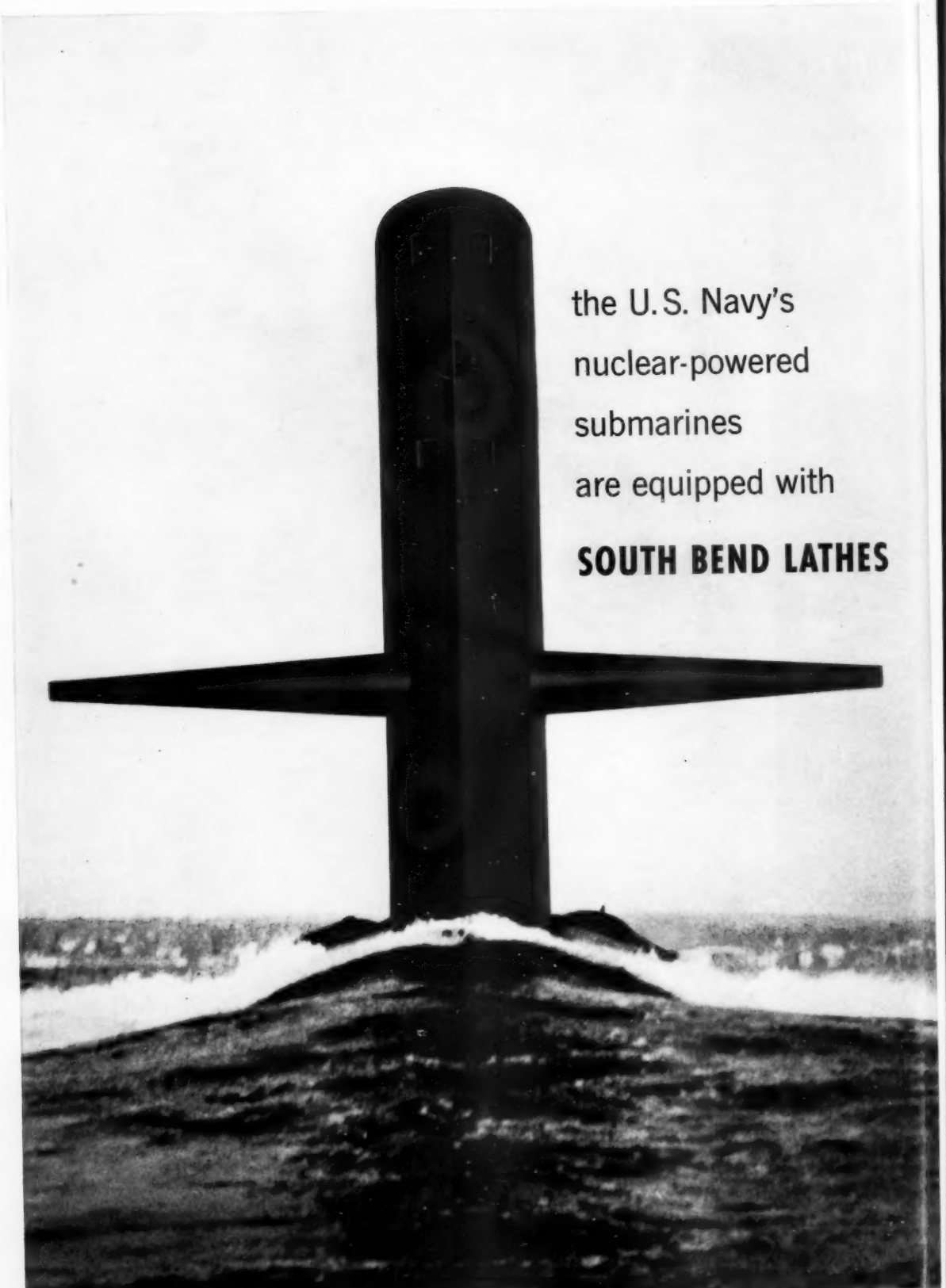

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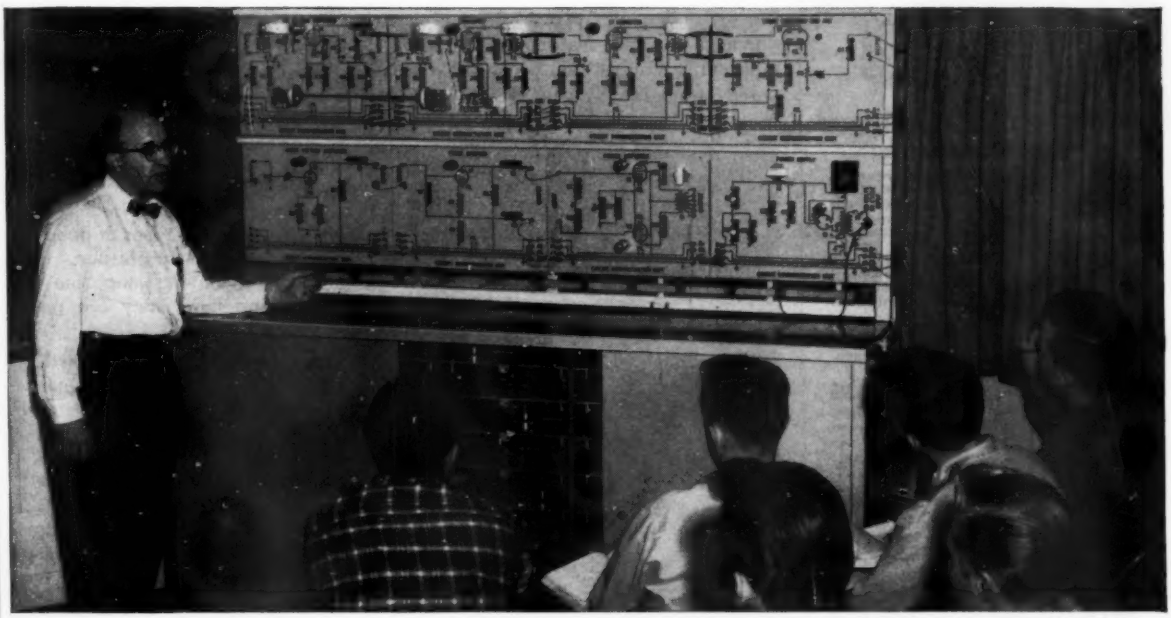

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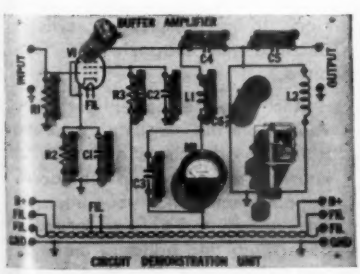

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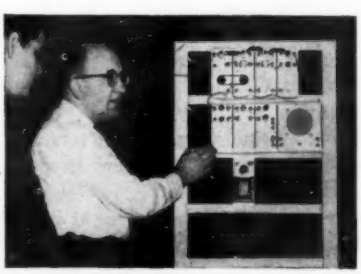

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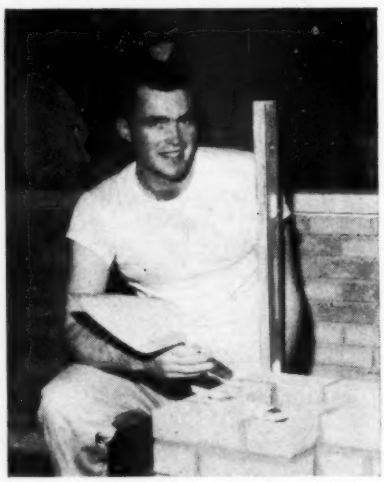
James Wall, of Waverly, Neb., has been appointed to the position of full time secretary for the National Vocational Agriculture Teachers Association. He will assume his duties July 1.

●

Arthur H. Gray, Jr., 20-year-old New Jersey apprentice, won the title of 1961 Champion Bricklayer Apprentice at the AFL-CIO Trades and Label Show in Detroit April 11. The title climaxed the 13th National Bricklayer Apprentice Competition which is sponsored annually by the Bricklayers, Masons & Plasterers' International Union to focus attention on its training program. Gray, who is a third generation bricklayer, won $500 from the BM&PIU and $100 and the Belden Trophy from the Structural Clay Products Institute. He represented Hackensack, New Jersey Local No. 23 of the BM&PIU and was New Jersey State Champion in 1960 and 1961.



●

Raymond Powell of Stillwater, N. J., is the winner of the National Safety Award made by the National Conference for Farm Safety and the National Safety Council. Governor Robert B. Meyner recently presented him with an engraved wrist watch awarded by the two safety organizations for his "best in the nation" report to the National Safety Congress held in Chicago last October.

In his sophomore year in high school he was the winner of the New Jersey Farm Electrification Contest which is sponsored by the New Jersey Farm Electrification Council. In 1958, he was the winner of a $100 scholarship awarded by the New Jersey State Grange.

INTRODUCING . . .

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american
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journal

VOLUME 36, NUMBER 5 MAY 1961

BPA Member, Business Publications Audit of Circulations, Inc.

SPECIALS

The Journal Salutes Maryland 9

The Importance of Student Selection for Quality Instruction
Robert M. Colver 15

Definitions of AVA Membership Classifications 18

Does Vo-Ag Have a Future?
Carroll P. Streeter 21

D-5: A Milepost and a Guidepost
Mildred Jackson 26

Building the Business Curriculum
H. G. Enterline 28

The Place of the Project
Donald Maley 32

REGULARS

Here and There 4

Latest Word from Washington 6

From the Public Information Committee 34

New Books 35

Research 37

This month's cover: In laying out the rover design for this issue we felt we were in square-peg-round-hole situation . . . until we threw caution to the winds and designed a square hole. We wanted to make the best use possible of the artwork provided for us by Sandra Bush in the Home Economics office of the Maryland State Division of Vocational Education. Had we run the map athwartships, we would have lost much of the detail, so we turned it 90 degrees and hoped for the best.

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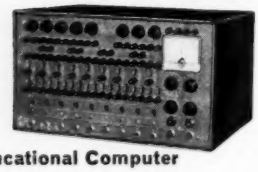

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HERE . . .

The cabinet of the Industrial Arts Policies and Planning Committees met at AVA headquarters on March 16 and 17. Attending the meeting were, from left (see cut), G. Harold Silvius, Wayne State University; Marshall L. Schmidt, U. S. Office of Education; G. Wesley Ketcham, Connecticut State Department of Education; John A. Jarvis, Stout State College; Robert M. Worthington, Trenton State College; Joseph Schad, Virginia Polytechnic Institute; and William J. Micheels, University of Minnesota. Harry O. Thomas, Louisiana State Department of Education was unable to attend.

Lowell Burkett, AVA Assistant Secretary, told the group that there is a tremendous revival in educational interest in Washington, that Congress is more concerned about education now than in any previous session. He pointed out that industrial arts programs will become increasingly important in secondary schools as vocational education continues its movement into the 13th and 14th years of schooling.

William J. Micheels, Industrial Arts Division program chairman for the 1961 (Kansas City) Convention, in cooperation with the cabinet has developed an outstanding program. Built around the theme, "New Frontiers in Industrial Arts," the program will include five half-day sessions: the place of industrial arts in special education programs, marketable skills in industrial arts, emerging developments in industrial arts, industrial arts and other areas of school curriculum, and a debate on the issue, "Resolved that industrial arts, vocational industrial education, and technical education be organized as a single department of industrial education in today's schools."

A sub-committee under Dr. G. Harold Silvius, chairman of the Industrial Arts editorial committee and Industrial Arts editor of the AV Journal, was appointed to study the widely circulated brochure, *Industrial Arts in Education*, for continuous revision. Dr. Silvius requested that all divisional members identify outstanding teachers in the field who might be asked to do Journal articles.

Other points of discussion . . .

The Industrial Arts Division Newsletter, initiated by William R. Mason, will be continued on a two-issues-a-year basis. All divisional members will receive this publication.

As the result of a suggestion at the Los Angeles convention, a committee is being appointed to study the possibility of summarizing and disseminating outstanding convention addresses.

Certificates of participation are being prepared for classroom teachers who served as speakers at Los Angeles. These certificates will be presented annually.

●

William L. Cooper, State Supervisor Trade and Industrial Education in Pennsylvania died April 17 from a heart attack. He rendered valued service to vocational education throughout the nation and also testified before National Congress in support of several vocational education measures during recent years.

AND THERE

Texas A. and M. College has been authorized to offer the Doctor of Education Degree in Industrial Education. This designation for Texas A. and M. College was recently made by the commission on Higher Education for the State of Texas. This is the first institution in the Southwest to offer the advanced degree for Industrial Arts and/or Vocational Industrial Education.

●

George L. Sandvig has been named director of vocational education for the Virginia Department of Education. Sandvig, who had been supervisor of trade and industrial education for the department since 1956, assumed his new duties on April 1 succeeding the late R. Edward Bass. Sandvig has been with the State Department of Education since November 1944. His experience includes teaching, supervision and administration of industrial and vocational education programs; industrial employment, including the training of industrial plant supervisors; and teaching at North Carolina State College and Virginia Polytechnic Institute. Prior to joining the State Department of Education as assistant supervisor of trade and industrial education, Sandvig was director of vocational education for the public school system in Greensboro, North Carolina.

●

"In the mosaic of educational experiences that make up the structure of the school curriculum, vocational education has an important role to play," Dr. I. E. Ready, Director of Curriculum Study, North Carolina State Board of Education, told 73 participants in the Southern Regional Conference on Trade and Industrial Education, in Roanoke. In an address Dr. Ready pointed out that the special role of vocational education is to fill the manpower needs of the society that supports it. "Because our society is a democratic one," he said, "vocational education shares with all education the responsibility for developing fully the human resources of the nation."

Members of a symposium explored new ways to provide a dynamic program of trade and industrial education through training and re-training programs for youth, young adults, and older workers. The conference program also featured topics dealing with training for industrial supervisory development, service occupations, new industry, practical nursing, and other occupations for women.

John P. Walsh, Director, Trade and Industrial Education Branch, U. S. Office of Education, speaking on "The Challenge of Quality Programs," stated that quality comes from constant and effective evaluation and that it involves such measures as instructors, curriculum and instructional materials, facilities and equipment, trainees, product, and service to the community.

●

The coveted honor of being selected the Distributive Education Student of the Year, was won by Miss Phyllis Mullican, State Parliamentarian, Huntsville High School, Huntsville, Alabama. She was presented a check for $100 by Mr. Clyde D. Ware, Program Director, Sears, Roebuck Foundation at the Third Leadership Conference Awards Banquet in Birmingham on March 6. This $100 becomes a $300 scholarship if Phyllis goes to college.

Selection of the Distributive Education Student of the Year was based upon data submitted on each student. This data included scholastic standing, club participation, achievement of vocational objective, and ability to get along with people.

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Latest Word from Washington

The JOURNAL is proud to salute Maryland's program of vocational and practical arts education. Through the years this great state has contributed much to our nation's program of practical education. It has furnished some of our nation's most outstanding and devoted vocational and practical arts educators.

APPROPRIATIONS. As we go to press both the Senate and House subcommittees on appropriations are completing hearings on vocational appropriations for the fiscal year ending June 30, 1962. Though formal action has not been taken there is every indication that Congress will approve a new all time high appropriation for vocational education for the upcoming fiscal year. It should be a source of encouragement to vocational teachers and officials everywhere that Congress has year after year increased the total appropriation for vocational education. There is no opportunity for increasing the appropriation for some phases of the program since the legally authorized amounts have already been reached. This is especially true in the fields of agriculture, home economics, and distributive occupations.

The total appropriation for vocational education for fiscal 1962 will probably be a little less than $53 million. This is an increase of almost $3 million over the amount appropriated last year.

THE PRACTICAL NURSE TRAINING MEASURE, S. 278 and H. R. 4104 (identical bills) passed both the House and Senate without a dissenting vote. The measure, PL 87-22, was signed by the President on April 24. This measure extends the authorization for $5 million for four more years and amends the measure so that funds can be used for old and new programs.

EXTENSION OF AREA VOCATIONAL EDUCATION ACT. On April 26 President Kennedy sent to Congress proposed amendments to the National Defense Education Act of 1958. His identical letters to the Speaker of the House and to the President of the Senate stated "The Vocational Education Program (Title VIII) should be extended pending completion of the re-evaluation of all national vocational education programs, to which I referred in my message of February 20." (Message reported in April, 1961, Journal). The measure (S. 1726) has been introduced in the Senate. The only proposed change in Title VIII is to extend the authorization for appropriations for three additional years and to eliminate the limitation of the amount ($15 million) that can be appropriated. This means, if approved, that Congress could appropriate an amount necessary to carry out the provisions of the Act.

SEVERAL NEW LEGISLATIVE PROPOSALS authorizing additional federal funds for various phases of vocational education are now pending in Congress. A brief statement of some of these measures is presented herewith.

S. 987 and H. R. 4703 (identical bills) authorize the retraining of persons displaced from their jobs by automation or other technological development, foreign competition, relocation of industry, shifts in market demands, or other change in the structure of the economy. Senate hearings on this measure were held on March 20 and 21. AVA furnished six witnesses whose testimony was well received by members of Congress. President Logan, speaking for AVA, requested a number of amendments to the bill as introduced.

S. 1 carries in Section 16 an authorization for $4.5 million annually for the vocational training of unemployed persons residing in designated depressed areas. This measure has been approved by both the House and Senate and now awaits the President's signature.

S. 404 is a bill that authorizes the establishment of a Youth Conservation Corps to provide healthful outdoor training and employment for young men and to advance the conservation, development, and management of national resources of timber, soil, and range, and of recreational areas. No hearings have been held on this measure. It contains one provision to which vocational and other educators will likely object. It contains a provision that authorizes the Secretary of Labor "to provide a system of educational service to enrollees of the Corps, in addition to the regular program of work and on-the-job-training". Educators will interpret this to mean that an agency of the federal government is being authorized to establish and operate schools. AVA will make an effort to get this provision changed.

S. 349 is a measure to "provide readjustment assistance to veterans who serve in the Armed Forces between January 31, 1955 and July 1, 1963". This measure calls for educational benefits for "cold war" veterans on the same general basis as was provided in provisions of Public Law 550. AVA furnished six witnesses who testified on this measure. We have been told by members of Congress that this bill has a 50-50 chance of being approved.

S. 1562 was introduced by Senator Smith of Massachusetts. It proposes to amend the National Defense Education Act of 1958 to provide financial assistance to public community colleges -- including junior colleges. It contains provisions that will be objected to by vocational educators. Among them is a provision for the use of federal funds in "public community colleges" to train individuals for useful employment as highly skilled technicians in recognized occupations. This is almost the identical language contained in Title VIII of the National Defense Education Act of 1958. If S. 1562 is enacted into law, it would mean that in some states two agencies of the government would be charged with virtually the same responsibility.

GENERAL AID TO EDUCATION measures are still pending before Congress. There is much evidence that the chances of passage of these measures have greatly increased in recent weeks. There have been some Washington releases that would indicate that funds which may be authorized under provisions of these measures, would be available for vocational education. Some releases are misleading. The bills now pending before Congress do not authorize any earmarked funds for vocational education. It is true that if Congress approves the measures that authorize use of funds for salaries of teachers, some of the funds may, in time, on a non-earmarked basis find their way into the hands of vocational teachers. As introduced, the bill (S. 1021) leaves to the discretion of state schools authorities the use of funds. They may be used for school construction or for salaries of teachers.

THE ADVISORY BODY OR TASK FORCE on Vocational Education, which was requested in President Kennedy's message to Congress on Education, has not yet (as we go to press) been named. We had hoped that we might carry the names of the group in this issue of the JOURNAL but they have not been released. We are hopeful that the "Advisory Body" will be made up of outstanding leaders who have a genuine interest in and knowledge of vocational education. We have been promised that every effort will be made to select such individuals. Since there will not be another issue of the JOURNAL until next September, we will probably release an AVA Washington Letter giving further information about the "Advisory Body" or "Task Force" if and when it is released by the Secretary of Health, Education and Welfare.

Sincerely yours,

M. D. Mobley

M. D. Mobley
Executive Secretary and
Editor-in-Chief

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and

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DECEMBER 2-8

General Outline of Convention Meetings

Associated Organizations and Special Groups	Saturday, December 2 Sunday, December 3 Monday, December 4
First General Session	Monday, December 4—8:00 P.M.
Second General Session	Tuesday, December 5—8:00 P.M.
House of Delegates	Thursday, December 7—8:00 P.M.
Division Meetings	Tuesday, December 5 Wednesday, December 6 Thursday, December 7 Friday, December 8
Exhibits	Tuesday through Friday

Hotel reservation forms will be included with the September, 1961, Journal

. . . and in the future AVA will meet in these cities:

1962	Milwaukee, Wisconsin	December 3-7
1963	Atlantic City, New Jersey	December 9-13
1964	Minneapolis, Minnesota	December 7-11
1965	Miami Beach, Florida	December 5-9

MAY 19

THE JOURNAL SALUTES

MARYLAND

Founded in 1632 by Lord Calvert, Maryland is the seventh of the thirteen original states. Much of our Nation's history was written in Maryland, the Free State. It is known as the home of many famous "firsts" in America—the first Monument to George Washington—Fort McHenry, the first United States Fort where Francis Scott Key was inspired to write the "Star Spangled Banner." Many notable men in the Catholic, Jewish, and Protestant Faiths made early strides to make Maryland a place where freedom of religion could prosper. In the field of Science, Maryland was the birthplace of the first gas street lamps in America, the first railroad, submarine—all were among the many Maryland "firsts" in the United States. Maylanders have been justly proud of their state's rich tradition from the time of the old Clipper Ships that sailed the Chesapeake Bay to its forward-looking present.

The State Capitol at Annapolis

Thomas G. Pullen, Jr.
State Supt. of Schools

The occupational structure in Maryland—as in the rest of the United States—is reacting to domestic and world challenge by changing to meet the needs of our times. The nature of the change is such that today's labor force must have academic education as well as occupational training in order to compete effectively at work and live happily at home.

Occupational training and academic education must be blended in our schools unless we would be a nation of unenlightened specialists or a nation of great culture unable to devise or construct the technical means to preserve that culture.

To meet the needs of the decade ahead, vocational education must be reorganized and the traditional curriculum replaced by one that provides a balanced program of general education and vocational education, with some of it in specialized areas.

Our economy has come to rely more and more upon the trained and skilled worker, and vocational education is therefore serving a vital need in that economy. More than that, in the decade ahead vocational education will become increasingly a more important part of the whole grand design of education, a great national resource and a source of strength for the free world.

It is evident, too, that the greater complexity of occupations, with a corresponding increase in responsibility for individual workers, will require school programs of a higher intellectual quality than ever before. Course content in vocational education will have to be broadened. Sound instruction programs will have to be provided in the trade and technical fields, as well as in agriculture and distributive education at both secondary and post-secondary levels.

All of this evidence indicates a likelihood of higher entrance standards for the selection of students being admitted to many vocational courses. Twenty years ago a young man could operate as an effective citizen with far less knowledge than he requires today. A vocational trade course may prepare a young man to be an electrician; through study and training he can move on to become an electrical technician; further study can make him an electronics engineer.

Projections into the future show that 75 per cent of the workers entering the labor market during the next decade will be needed in occupations where occupational preparation in high school is a desirable asset. The opportunities available to youth emphasize the need for high school and post-high school education. It is quite evident that the kind and amount of education young persons receive affect their lifetime careers.

The people of the next decade are going to stay in school longer because of their growing aspirations, and they are going to demand increasing educational opportunities at all levels—elementary, secondary, college, and adult.

The kind and amount of education we provide our youth affects lifetime careers, both in earning potential and job stability. At present vocational education is available to only a portion of those who are in need of such education. The future will place heavy demands on our schools to extend and modify the present programs so they will more adequately serve our State and the Nation.

CHANGE and CHALLENGE are the key words in the vocational education field for the decade of the 60's, and the Free State of Maryland enters it with excitement and enthusiasm. It feels this way on the basis of its prior performance, preparation, plans, programs, and people.

The appellation "America in Miniature," is more than a catchy phrase. Industry, trade, and agriculture prosper in Maryland. Big cities, small towns, suburban locations, open country—are all here in the third fastest growing state on the eastern seaboard and the seventh fastest growing state in the nation.

With its deep-water world port of Baltimore providing ready access to overseas areas and an ideal receiving point for incoming cargoes, Maryland is the center of a vast transportation network of water, land, and air services. Its major industry is steel (capacity—5th in the world), with transportation equipment, aircraft and automotive assembly, manufacturing, chemicals, shipbuilding, textiles, electronics (plus research), and electrical equipment being other industries of great importance to a diversified economy with great potential.

More than 1,000,000 of its more than three million population are gainfully employed—of which 300,000 are women. More than seventy per cent of the non-agricultural labor force is engaged in manufacturing, government, and wholesale and retail trades. The remaining 30 per cent work in transportation, construction, communication, utilities, finance, insurance, real estate services, and other occupations.

This, then, is the background against which those charged with the responsi-

bility for vocational education in Maryland meet the challenge that arise from the changes taking place in the population and labor force between 1960 and 1970—and in our occupational and industrial structure.

In the development of the program for the future, exciting opportunities exist for experimentation and pioneering. At present the direction is toward the development of a school of multiple purposes which is in full accord with the realities that exist in a society of multiple values. Changes resulting from expansion and revision of programs are designed to make vocational education more attractive to students who might otherwise drop out of school. New curriculums are likewise designed for students with ability and interest in academic work to include such subjects along with work in shops and laboratories.

At this point let's take a look at one of the four areas of emphasis in Maryland's educational program: practical arts and vocational education. The chart on the following page lists the subjects required for graduation, the elective curriculums and major subject sequence available to the students.

The scope of Maryland's program and services can be understood more fully if it is observed that adult education and evening extension classes involve related, technical and skill-improvement programs in agriculture, business education, home economics, distributive education, trade and technical education, practical nursing, and other state programs and services for adults; that teacher education involves pre-service and in-service programs, workshops, and skill-development clinics; and that educational services to industry, business and labor involve liaison between industry and the Departments of Education, consultative and advisory assistance, demonstration courses, conference leading, and program organization.

Let's focus attention on some of the outstanding events, programs, and accomplishments — together with some of the trends and timely indications of changes—that have taken or are taking place in Maryland in the fields of vocational education and practical arts.

Turning first to **agriculture,** we find that changes were never more far-reaching, never more rapid, never more numerous in any other period. The impact of change on the Maryland farming pattern is causing fundamental

Please turn page

H. M. James
State Vocational Director

We deeply appreciate the opportunity to tell the story of Vocational Education and Practical Arts in this issue of the *Journal.* The members and friends of the Maryland Vocational Association feel that this is a great honor to have bestowed upon our State and it is with pride that we present some of the highlights of the program.

Maryland can rightfully take pride in its educational system. Its present legal structure provides a fine balance between state authority and local autonomy. Its professional leadership and contributions by teachers, administrators, labor and industry enables the state to develop sound vocational programs. Many have made significant contributions but we would like to specifically salute the work of Dr. Charles W. Sylvester, retired, former Assistant Superintendent of Schools in Baltimore, and the late Dr. John J. Seidel, Assistant State Superintendent of Schools in Maryland.

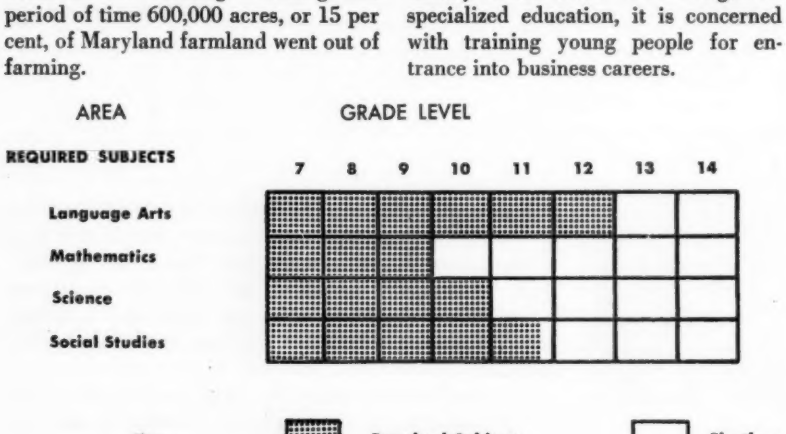
With all of its past strengths and achievements, vocational education faces new problems and new issues. The rapidly increasing complexity of our scientific-technological culture demands better preparation than ever in the technical knowledge and skills for our boys and girls entering the world of work. With the increased demands for more intensified education for workers, the problem of meeting those demands has become more acute. Consistent with our democratic principles, it is our opinion that the public schools should provide an opportunity for all individuals to achieve a high degree of vocational competency, whether it be technical, industrial, scientific, commercial or agricultural. The development of these skills cannot be left to chance; it must be a part of a well planned and coordinated program. With this a challenge to the future, we approach the years ahead with confidence and expectation of continued progress.

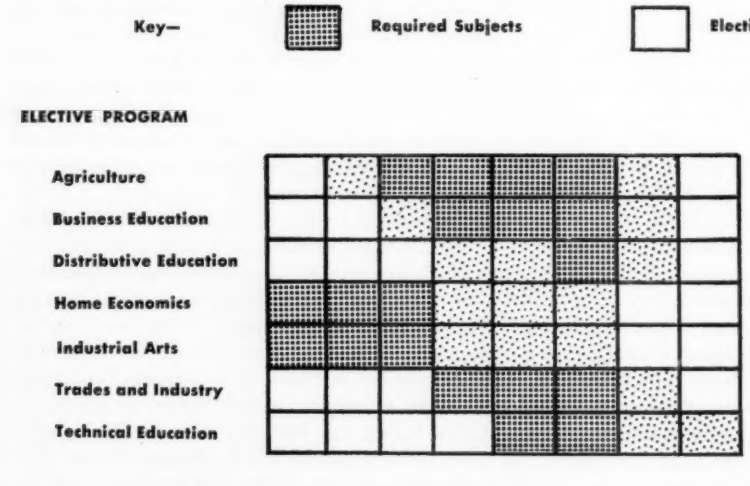
Above, experience in upholstering and cost comparisons are but two of the areas open to future homemakers. Right, many students start their dairy enterprises while in high school.

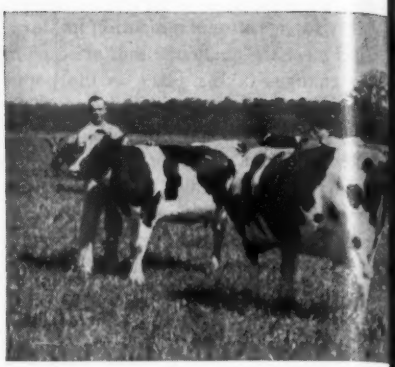
changes in agricultural teaching as regards both method and content.

A comparison of census reports for 1950 and 1960 shows many changes. Suburbanization, industrialization, highways, and growth of government projects reduced the amount of land available for farming. During this period of time 600,000 acres, or 15 per cent, of Maryland farmland went out of farming.

Business education has a dual purpose in the secondary schools. As a part of the entire school program, it is concerned with general education, and must assume its full responsibility for the common objectives of education, for all boys and girls on the secondary school level. As an organ of specialized education, it is concerned with training young people for entrance into business careers.



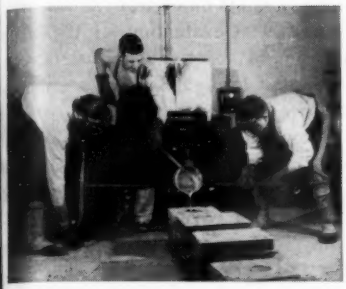




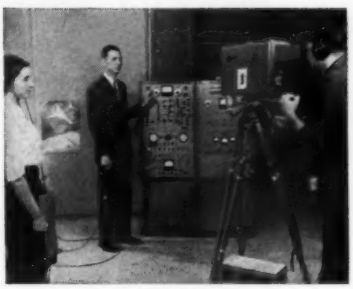
Because business education contributes to better ways to live, as well as better ways to make a living, its courses are valuable to all pupils. Flexibility in departmental lines allows a free intermingling of academic, general, and business majors in its classes. Its potentialities are such that its program may enrich and enlighten as well as train for the mastery of mechanical skills.

In considering what is happening in Maryland in the **home economics** field, it is again necessary to observe that the element of change inherent in recent scientific and technological advances is having a tremendous impact in the home and its familiar patterns of family life. Maryland teachers, supervisors, administrators and lay people have been working together to meet the new challenges for curriculum development. Using as a guide the list of competencies for effective living developed recently by the Committee on Philosophy and Objectives of Home Economics Association, Maryland is giving special emphasis to management, child growth and development, consumer buying, family and community health, home planning and furnishings.

To strengthen family life, which is the basic goal of home economics, it is necessary today to take into account that more and more women are assuming multiple roles of wife, mother, worker, and citizen. They are marrying younger. They are having their children earlier. As both wife and mother they increasingly tend to live great distances from parents and relatives who could counsel and assist them. As workers, they are combining marriage, parenthood, and employment outside the home. As citizens



Right, occupational information and opportunities covering a broad scope of trades and technical areas are communicated via closed circuit television by the guidance service.



Left, in teacher education, the industrial arts foundry offers an area where real industrial teamwork and experiences are shared.

they are giving more of their leisure time to community activities and civic affairs.

Increased income and changes in what are economic necessities, and the change in family function from a production to a consumption role call for new skills and abilities in economic competency. Practical experience in buying is afforded Maryland girls through experiences of planning, purchasing and evaluating equipment and furnishings in new home economics departments, field trips to study furnishings for the home or to purchase fabrics for clothing construction projects, or to study ready-to-wear garments.

As preparation for the important role of parenthood, Maryland girls are receiving first-hand experience with pre-school age children throughout their study of child growth and development.

Understanding the importance of food to family health is emphasized through the study of nutrition and through planning, selecting, and preparing adequate meals. This experience in meal management also integrates learning in management, consumer buying, art, family relationships, and health.

Finally, in preparing Maryland's young women for the new leisure time pursuits that point toward social service, community activity, civic and public affairs, cultural and educational activities, there is no more effective means than the programs of work being provided by the Future Homemakers of America and the New Homemakers of America clubs. In 1961 Maryland chose to emphasize family unity in its program of work. The special state project was entitled "Getting to Know our Senior Citizens."

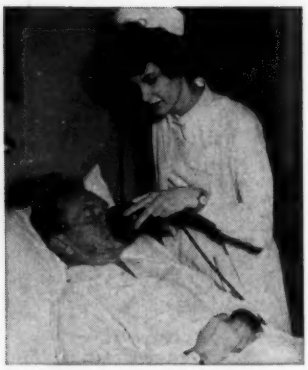
Now let's look at what's happening in **industrial arts.** Industrial arts is rapidly becoming an area of vocational-technical orientation with subject matter content being influenced by new materials, concepts, and processers. We believe that the next decade will witness a maximum contribution by the profession because the needs of the times require that all education have a strong technical orientation in this age of technological wonders. The contribution will not be as much in the realm of theoretical science and mathematics as it will be in the shop and laboratory development. In an atmosphere of tools, materials, machines, references, handbooks and planning tables, industrial arts finds itself the heart of educational substance. More than that, industrial arts is becoming a multi-level program that is an integral part of the entire school.

The variety of concepts and opportunities offered in the junior and senior high schools of the state reflects the great diversity of industry and geography with its accompanying high degree of varied employment needs and opportunities. In meeting the challenge of the future industrial arts will continue to broaden its scope and improve methodology. Activities of experimentation, testing, analysis and discovery will continue to be added to the program, with in-service and pre-service teacher education programs devel-

Please turn page

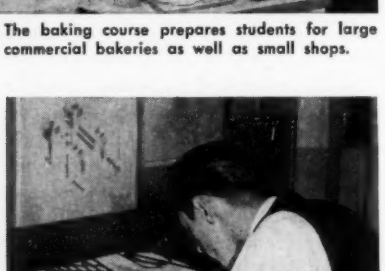
Developing a skill in operation of modern business machines is essential in preparing youth for business occupations.

Industrial arts is an accepted subject in every junior high school student's program of studies. In this area of general education, students have an opportunity to achieve the maximum within their interests and abilities.



Patient care in hospitals offers nursing graduates fine opportunities.

The baking course prepares students for large commercial bakeries as well as small shops.



Tool design technician makes axionometric projection illustrations.

Electronics courses prepare students for well-paying technical occupations.

oping teachers capable of meeting the challenge.

The rapid technological changes that are taking place in Maryland present new challenges for preparatory and extension training in **trade and industrial education.** Here are some immediate changes:

1. Fewer unskilled workers will be needed.

2. Many machine operators are being replaced by automatic machines.

3. There is a corresponding increase in the need for mechanics with a high degree of technical skill and knowledge.

4. Today's craftsmen need to be trained to work as a team.

During the last decade the school curricula for preparatory training programs has been revised to include more extensive instruction in mathematics, science, related technology and communications. Trade and industrial supervisors and guidance personnel are working together to provide materials for useful counseling of students and for developing better techniques for selection of students.

During the ten-year period, 1950-1960, 7,984 students graduated from vocational trade programs. Approximately 60 per cent were available for employment and 70 per cent of that number were employed in trades for which training had been given. Five-year and ten-year follow-up studies made in a few schools showed that 70 to 85 per cent of graduates were working in occupations for which training was given or in directly related occupations.

Maryland is a major center of scientific research and engineering that is creating and discovering the new realm of tomorrow. Tomorrow will be the age of space, electronics, and nuclear energy, requiring not only new mechanisms and systems for development but also trained mindpower for service and operation.

The greatest demand for skilled technicians in Maryland centers around the electronics field, as indeed it does for most scientific and industrial endeavor. Development of this area of curriculum development has been aided immeasurably by implementation of Title VIII of the National Defense Education Act which, among other things, has made possible a re-evaluation of the whole program of vocational industrial education and brought the needs and possibilities into focus.

One of the newest vocational education programs to be inaugurated in Maryland is practical nursing. The program now covers pre-clinical classroom work and training during the 10th and 11th grades, with the theory and practice in clinical subjects acquired at the cooperating hospital.

Cosmetology training prepares girls for State Board exams and entrance into commercial shops as beauticians.

Change and challenge are once again the most descriptive words to characterize **distributive education** in Maryland's vocational education program. Never has the dynamic and changing character of retail distribution been more pronounced than it is today. This derives from an economy that is at a high level and highly competitive. Twenty-one per cent of non-agricultural employment in the state is in the area of wholesale and retail services.

These, then, are some of the highlights of Maryland's "doing" and "thinking" in vocational education. The challenge for the future could mean the Golden Age of Vocational Education and Practical Arts.

We are enthusiastic and confident of the future.

The Importance of Student Selection for Quality Instruction

Robert M. Colver
Duke University

IN CONSIDERING the relationship between student selection and quality instruction, let us look at three general aspects of selection and its effect on the quality of instruction.

First, we want to consider the general principles concerning selection procedures and selection policies. Second, we want to see how the development of selection procedures affects curriculum planning and thus the quality of instruction. And third, we want to see how good selection affects the classroom or shop instruction.

Note the significance of the title of this paper. We are identifying the area under discussion as "trade and industrial education." Not too many years ago, it might have been identified as trade and industrial training. This is an important point to keep in mind: we are selecting students for an education, not for the purpose of training.

As a point of departure, then, let us define this term "education" that we are using. In general, the term "education" is used to name a process that is concerned with the changing of the behavior of students, using behavior in the broad sense to include thinking, feeling, and acting. If we really educate our students, they will have ideas that they did not have before, knowledge that they did not previously possess, skills that they had not developed before, and attitudes and interests that were not previously present. In brief, any educational process is concerned with bringing about changes in the way students behave. Thus, in this framework, when we are talking about selection and admission of students, we are concerned with selecting and admitting those students whose behavior can be changed in the way that we believe to be desirable for our purposes.

Whether we like to accept it or not, the fact is that the selection and admission of students determine the life and death of our school or institution. This, then, raises the question: should we be concerned primarily with the interests of the institution or school, or with the interests of the students? These two concerns are not necessarily in opposition to one another. Broadly conceived over a long term, the school or institution benefits when the welfare of the applicant and the admitted student is given first consideration. All too frequently, this long term view does not prevail and selection and admission suffer from two kinds of shortcomings. First, students are admitted sometimes after active recruitment without adequate regard to their chance of success. And second, the selection and admission data are not utilized after admission is effected.

The first of these two shortcomings is the more serious. Encouraging a student to enroll in a school or course should be done only upon the basis of reasonable evidence that he can successfully complete the course. Failure is seldom helpful to the individual and often provides a serious threat to his self-confidence. It is unethical to admit students to a course without regard for their chances of succeeding. Frequently, it will seem desirable to admit the son of an important foreman in a cooperating plant, or the son of a school board member, or even the foreman himself by making exceptions to the selections and admissions standards. From a public relations viewpoint this might be defensible, from an educational viewpoint it is not. For if standards of selection and admission mean anything, they are established to admit those who have a reasonable chance of succeeding in the course or in the school. To admit below this level is to admit deliberately an increasing number of students who will in all probability fail. This is not admissions in the interest of the students, and admissions not in the interest of students are probably not in the best interest of the school.

The second shortcoming of selection policies that was mentioned was that of not making use of admissions and selection data. A good selection program will provide for the accumulation of a considerable amount of important data concerning the student. If, once the student is selected and admitted, this material is placed in the file and forgotten, much valuable information is lost. In the selection proc-

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ess the student has normally provided considerable information about himself, and about his hopes and ambitions; he has the right to expect that this information will be remembered and transmitted to those people who can make use of it to assist him in his educational program.

It would be wise at this point to make a distinction between the problem of selection and the problem of recruitment. In the proprietary trade or industrial school, recruitment is the life blood of such schools. Their bread and butter depends upon the number of students that they can enroll and too often little concern is given to selection. Thus recruitment is commonly thought of as implying quantity where selection is normally thought of as implying quality.

Recruiting

Do the publicly supported trade and industrial schools need to recruit? The answer is yes: not to get greater numbers of students but to have a greater number of applicants from which to select, and thus have a better opportunity to get quality students. Let no one be trapped by the idea that we need to keep growing in size in order to prove our worth. We can prove our worth by improving quality equally as well as by improving size.

The deification of size seems to be peculiar to American people. We have pride in our largest city, the tallest building, and even the largest student body. Of course, the more students that you have, the more impressive your showing will be when it comes time for appropriations. But concentration on quality can be as effective for justification. As we recruit for our schools, we are recruiting to get more and better applicants from which we can select students for our courses. Thus in selection and admission the focus is the welfare of the students, and the selection based an the best interest of the student will always be to the best interest of the institution.

Student-focused selection will have to be based upon a set of selection criteria. The following are suggested as criteria which should be taken into account in a balanced selection program:

1. Academic aptitude
2. Academic achievement
3. Motivation for the type of study to be undertaken
4. Family support, both financial and attitudinal
5. Social and emotional maturity to the demands of the course under consideration
6. Basic knowledge in tool subjects
7. Health and physical stamina
8. Assurance that your school has a definite place for the student of this ability
9. The ability of your school to meet the needs and expectations of this particular student.

The first seven of these criteria depend upon our knowledge of the student. How do we find out much of these various criteria a prospective student has? We find this out in varied ways: by tests, by records of previous achievement, by interviewing, by observation, and by recommendations and reports from people who know the prospective student. This suggests that we need to obtain a tremendous amount of information about our prospective students if we are to do a good job of selection.

But the more important question is, "How much of each of these does the individual need for the particular course that is under consideration?" The answer to the question "how much is needed" is not easy to obtain. The only acceptable way to obtain answers to this question is by research and followup. We find out which students succeeded and which failed, and attempt to understand why. What did the successful student have that the unsuccessful one did not? When we find out what the successful students have that the unsuccessful ones do not have, we then know what to look for in our selection of future students. Thus our criteria that we use for selection of students must be constantly validated against the student's performance, not only in school but in his later success on the job.

Changes

If one of the purposes of education is to make desired changes in the behavior of students, we must first identify the kinds of changes that we want to make, and then select students in whom we can effect these changes.

This brings us to the second general aspect of selection: the effect that selection procedures have on curriculum development and the establishment of the objectives of any course. You will say "But our objectives are established before we start a course and before we start selecting students." These objectives are usually general in nature and made more effective as they are modified to become specific in emphasis.

The information which has been obtained about students who have been admitted or selected for the course certainly should suggest possible modification or extension of the course objectives. If this data indicates that students lack certain basic information, if they have not developed appropriate habits, or if they lack breadth of interests, certainly this information would suggest possible objectives within your course that need to be emphasized. The information about students might also show that you need to eliminate misinformation, that you need to assist the students in acquiring basic knowledge and skills, or that you have the opportunity to capitalize on basic interests and skills already in existence and thus broaden and strengthen them. Thus a by-product of the information obtained in selection could certainly be the formulation of more specific objectives with a resulting improvement in instruction.

Selection

In order to identify these specific objectives, we need to involve more than our curriculum planners or our administrators. To set up the kind of specifications that a good selection program requires involves each and every instructor for each and every course. This provides a strong stimulus to the instructors to clarify the objectives sought in each of their courses. It directs their attention more clearly to the analysis of objectives, the effectiveness of the learning experiences, the planning of organization, and the identification of results. Thus we see that selection procedures make an important contribution by helping to clarify the educational objectives and by providing concrete basis to guide in the planning and development of the educational program. Not all of our selection procedures will provide these important aids to curriculum construction but some will.

The third aspect of the relationship of selection and instruction is the more specific relationship of selection to classroom and shop instruction. We have just pointed out that the selection will probably assist the instructor in clarifying the objectives of his course and thus help organize the learning sequences and activities of the course. When the considerable information about incoming students obtained in the selection program is summarized for any given class, the instructor should have an adequate indication of where he needs to begin his instruction in any given subject, how far he can expect to go, what areas need additional emphasis, and what areas need little emphasis. Thus he is given clues and direction for instruction of the class as a whole.

When the instructor analyzes this information for each student, he should have a fair idea of where each student is in his total development, what that particular student's limitation might be, where this particular student needs special help, and what particular strengths this student might have and might be further developed. Under such circumstances, the instructor is not groping in the dark. He is not searching for a beginning place. He knows the material that he has to work with and knows where to begin. Much lost motion is avoided.

Good selection procedures should result in classes of rather homogeneous nature. Certainly a selection process can be expected to eliminate those at the bottom end of the scale who could not profit from the instruction. But further, a good selection process will probably eliminate some at the extreme upper end of the scale who could not profit from the instruction being offered in any given course. We readily accept the fact that we do a disservice to an individual when we accept him for a course of training his background of experience and education is insufficient for the course. We frequently overlook the fact that we may do a disservice to an individual whose background of experience and education is such that he is so far above the level of the class that little is gained by his attendance at this class. Therefore, a good selection procedure should result

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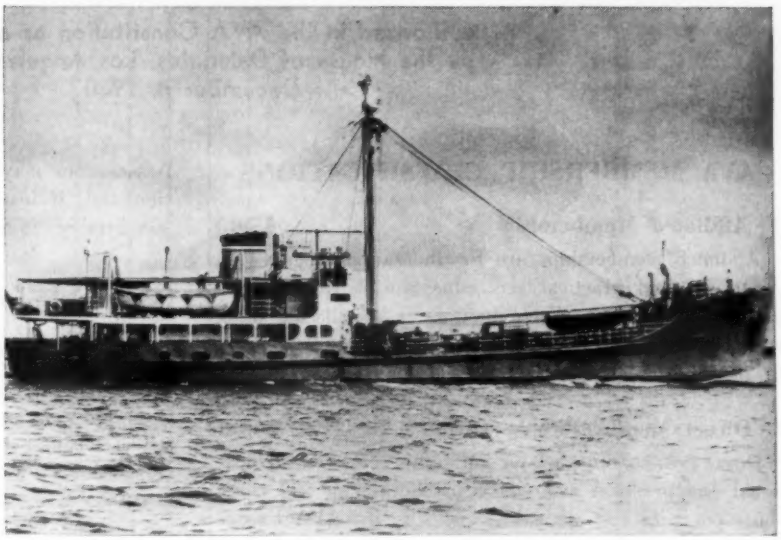
FLOATING CLASSROOM ACQUIRED BY LOUISIANA SCHOOL



The 158-foot, 493-ton cargo vessel shown above will be the future training "ground" for students of the Gulf Area Vocational-Technical School, Abbeville, La. Valued at more than a million dollars, the ship will be used as a nautical school for instruction in seamanship and engineering. The ship, formerly the property of the U. S. Army and named the *Lt. Harry J. Michaels*, will be berthed at Morgan City, La. She will be renamed after she has been moved from New Orleans to her berth in the Atchafalaya River.

Formal transfer of the ship took place January 24 in the offices of State Superintendent of Education Shelby Jackson in Baton Rouge. Acceptance ceremonies were held April 4. AVA's M. D. Mobley attended the latter ceremonies.

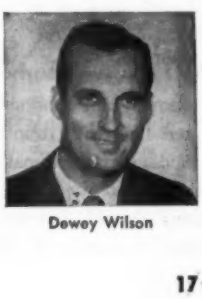
M. W. Finuf

M. W. Finuf, director of the school, revealed that the ship was turned over to the school for $400—$200 for the vessel and $200 for spare parts. The ship was built in 1943 at an original cost of $983,000. It was recently declared surplus property.

The *Michaels* is equipped with two 300-horsepower diesel engines. It is constructed of welded steel, has a beam of 32 feet, and draws seven feet. As a cargo vessel it requires a complement of seven officers and 13 men.

Under the instructorship of Dewey Wilson, the nautical training program is in its third year of operation at the Morgan City School. Space limitations restricted training, and Director Finuf had been looking for a small school ship which would provide the additional space as well as give students on-board training.

Commercial marine operators too had long felt the need for a school ship. During an interview, one Gulf Coast businessman told of the difficulty in obtaining adequately trained personnel to man a fleet of vessels for the oil industry. He predicted that the school ship would help alleviate the shortage.



Dewey Wilson

Said a public service advertisement in a local paper, "This new facility will offer heretofore unavailable opportunities to those who seek the training and knowledge required to become an important part of our fishing and oil industries. It is a tremendous stride forward for all of the people of our area."

Morgan City will provide free docking facilities, electricity, and fresh water.

DEFINITIONS OF AVA MEMBERSHIP CLASSIFICATIONS

authorized in the AVA Constitution as amended
by the House of Delegates, Los Angeles, Calif.,
December 8, 1960

AVA MEMBERSHIP CLASSIFICATIONS

1. Affiliated Membership **$5.00**

Affiliated memberships are for individuals engaged in vocational and practical arts education more than 300 clock hours per year. These dues are to be collected along with the state association dues and submitted to the AVA by the state association.

2. Direct Membership **$6.00**

Direct memberships are for individuals engaged in vocational and practical arts education more than 300 clock hours per year and are paid *directly* to the AVA Executive Secretary. Such memberships are encouraged only when a state association does not encompass the field of vocational and practical arts in which the member is engaged.

3. Associate Teacher Membership **$3.00**

Associate teacher memberships are for individuals who are engaged as part-time or extension teachers for 300 or less clock hours of vocational and practical arts teaching per year and whose annual dues are submitted by an affiliated state association. Such dues may be submitted directly if the state association has no provision in its constitution for such membership; however, every state association is encouraged to give consideration to such a membership classification.

4. Student Membership **$2.00**

Student memberships are for full time students preparing to teach vocational or practical arts subjects. Dues may be submitted through a state association when the state association has a student membership classification or directly to the AVA Executive Secretary if no student membership classification exists in the state association. Summer school students who teach full or part-time vocational or practical arts courses in the regular school term are not eligible for such memberships but are eligible under classification 1, 2 or 3.

5. Loyalty Membership **$2.00**

Loyalty memberships are for individuals who have retired from full time activities in the field of vocational or practical arts education and whose annual dues are paid directly to the AVA Executive Secretary. State Associations should assume the responsibility of informing retired teachers of this membership classification. State Associations may establish such a membership classification and, if instituted, should collect and submit these memberships to the AVA.

6. Associate Lay Membership **$10.00**

Associate lay memberships are for individuals *not* employed in vocational or practical arts education but who may have a direct interest in the association or wish to promote its activities. Such memberships may be submitted through an affiliated state association if the state association has such a membership classification or directly to the AVA Executive Secretary. A certificate appropriate for framing will be provided each associate lay member.

7. Endowment (Life) Membership **$150.00**

An endowment (life) membership is for individuals who wish a lifetime membership and who pay the amount in full to the AVA Executive Secretary or wish to pay the amount in 6 yearly installments of $25.00 each. A certificate appropriate for framing and a life membership pin or button are awarded. State Associations may establish such a membership classification and, if instituted, should collect and submit these memberships to the AVA. Firms, organizations, or groups of individuals wishing to honor some individual for service to vocational or practical arts education are urged to give life memberships as an award.

8. Associate Group Membership (Local or State) **$25.00**

Associate group memberships are for local or state firms or organizations whose dues are paid through a state association. Such a classification provides the state association an opportunity to set up an appropriate membership classification to solicit memberships from firms or organizations within the state and to collect dues of a fixed amount for the state association. The AVA will award a certificate appropriate for framing.

9. Associate Group Membership (State or National) **$200.00**

Associate group memberships are for state or national firms or organizations who pay dues directly to the AVA Executive Secretary. Such memberships will be solicited directly from the AVA Executive Committee and Office.

Please turn to Page 20

DIAGRAM SHOWING TRANSITION TO THE NEW AVA MEMBERSHIP YEAR

CHANGE OF MEMBERSHIP YEAR
*1961-62 MEMBERSHIP YEAR
*1962-63 MEMBERSHIP YEAR
1961
1962
1963
Dec. Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June July
SUBSCRIPTION YEAR
SUBSCRIPTION YEAR
SUBSCRIPTION YEAR
Subscriptions are entered throughout the year upon receipt of dues
Delegates to the AVA House of Delegates will be determined by Nov. 1 Membership Report
Subscriptions continue for one full year and will be renewed without interruption if memberships are paid before the subscription expires

* Membership records by classification and by states will be kept by AVA office

† Subscription records will be maintained on IBM card system

It should be noted that the subscription year for the American Vocational Journal resulting from the new membership year for 1961-62 will run substantially into the 1962-63 membership year. This will be beneficial to the AVA member, since it will avoid any interruption in receipt of the magazine.

A certificate appropriate for framing will be awarded. Each firm or organization holding such a membership in a given membership year will be entitled to send a representative to Washington, D. C., for a one day meeting to discuss latest developments in vocational and practical arts education. Copies of appropriate publications of the association will be provided in sufficient quantities for distribution to Boards of Directors of said firms or organizations.

CHANGE OF MEMBERSHIP YEAR

All memberships shall be filed with the AVA Executive Secretary and shall be effective for the membership year in which they are submitted. For 1960-61 the membership year is December 1 through November 30. **Effective July 1, 1962, the membership year shall extend from July 1 of one year until June 30 of the following year.**

Each membership under the above classification shall include one full year's **subscription** to the *American Vocational Journal.* The subscription begins when dues are received by the AVA Executive Secretary and continues for one full year.

When a renewal of membership is reported to the AVA Executive Secretary the subscription year for the *American Vocational Journal* is then extended one full year from the date when it would have expired as the result of the previous year's membership.

Beginning in the spring of 1962, the AVA membership campaigns should be held prior to the close of school or during the summer workshops or conferences so that the memberships are reported to the AVA by July 1 of each year or soon thereafter. The AVA office will then have an opportunity to process the membership for renewals or new members before the magazine is sent about September 1. In order that the memberships can be counted for delegate representation at the annual House of Delegates meeting, memberships must be received in the AVA office by November 1.

Affiliated state associations are encouraged to change their membership year to conform with that of the AVA, namely, beginning July 1, 1962, from July 1 of one year through June 30 of the following year.

●

Your State Association and AVA Need You and You Need Your State Association and the AVA.

AVA ADOPTS NEW PROCEDURE FOR MEMBERSHIP REPORTING

Much study has gone into making improvements which will provide better services to AVA members. In the past, memberships often were not recorded until a great amount of time had elapsed from the date dues were paid. The following factors caused delays:

1. Memberships are collected in the states and held by the state associations until a sufficient number can be reported to justify making out a check to cover the amount of the dues.
2. State association secretaries often are overloaded with administrative details of membership.
3. A large number of memberships are received in the AVA office at one time, causing delay in membership processing.
4. Electronic card punching operations are overloaded at heavy reporting periods.

These delays have often meant that members did not receive their membership cards from AVA and were not placed on the *American Vocational Journal* mailing list until late in the membership year.

To expedite membership recording, new procedures have been adopted.

A multi-part membership form for each member is being printed. Full information, such as name, address, date of subscription expiration, and membership year will be transferred to the membership renewal form for the 1961-62 membership year. These forms will be categorized by fields of service and sent to the membership secretaries in the respective states.

When a member renews his membership for 1961-62, the membership card will be given to that member on the spot. One copy of the renewal form will be retained by the division of the state association. A second copy will be retained by the state association. A third copy will be returned immediately to the AVA office. The state associations will be billed periodically by AVA for membership dues, and at the same time state associations will be provided with a list of the members for which they are being billed.

A different form is being printed for use in recruiting new members. This is also a multi-part form. The new member receives his membership card immediately upon making application. There is a copy for the division within the state association, a second copy for the state association, and a third copy is mailed immediately to AVA.

If you were an AVA member for the AVA fiscal year beginning December 1, 1960, through November 30, 1961, there will be a membership renewal form in the hands of your state association secretary. You will be requested to renew your membership utilizing this form.

If you are not approached for AVA membership renewal by December 1, 1961, please contact your state association membership secretary for your form.

"For the life of me, I can't see why a good guidance counselor wouldn't be as good an investment as a football coach . . ."

Does Vo-Ag Have a Future?

Carroll P. Streeter
Editor, Farm Journal

THE TEACHING of vocational agriculture in the high schools of America has had a glorious past. Does it have much of a future? If so how do we bring it about?

I am tremendously interested in the question. Anyone would have to be who claims any interest in agriculture, or any interest in farm families and in their farm boys. All of us are interested not only in economics but in the very human beings involved — their struggles, their aspirations, their great desire to succeed. All of us want every boy to *succeed*, to fulfill his possibilities, to make his greatest contribution, to achieve right up to his personal limits—not only for his sake, not only for his family's sake (although there is a world of poignant drama wrapped up in that) but for America's sake.

I believe that education in vocational agriculture can have a brilliant future, but only if we are willing to rouse ourselves enough to bring it about. It is not automatically assured.

First let us consider whether agriculture itself has much future. There are a great many people who doubt it.

It's no wonder. Net farm income has been slipping since 1953 and 1959 was a particularly bad year. There was trouble out in the country; let's admit that. But never in my 35 years in the farm journalism business have I seen such a public wake held over agriculture.

For every newspaper, magazine, and TV network it became the thing to do to carry a feature story about the plight of farmers. City reporters parroted each other's exaggerations and distortions. Some of them sallied out to interview a few farmers on how they were doing, and hurried back with the surprising discovery that farmers said they "weren't doing so good."

The fact that farmers were leaving the farm was played up as some kind of new phenomenon. The number of auction sales made national news.

From all of this it appeared that there weren't too many people left in farming any more—only 10% of the population—and except for a few who were getting outrageously rich by feeding at the public trough, it wouldn't be too long until many of the survivors were "forced off," or were starved out.

Nor were city people the only ones who began to wonder. Farm people themselves, reading about the dire straits they were in, got something of a brain washing. Many wrote us at *Farm Journal* to say they had children who wanted to farm, and who could stay on the home place, but that they were advising against their going into any such unpromising business. Farm boys were reading about the glamour of the space age, engineering and electronics on the one hand. But when it came to agriculture they read about the price-cost squeeze, surpluses, and subsidies.

And how about you and me? Have *we* sometimes wondered whether farming has seen its best days? Can *we* see much future in it?

Perhaps it's time all of us renewed our perspective. Even those of us who are in the agricultural business get so close to our particular phase of it that we lose sight of, or forget, how tremendous a thing American agriculture actually is.

Farming is still far and away our biggest single industry in this country. And it is getting bigger, not smaller. So long as people keep eating three times a day, and so long as we seat 8000 *more* people at the breakfast table every morning, agriculture is a growth business if there ever was one.

The USDA figures, unfortunately, don't always show its true size. We read about farmers having $11.5 billion of net farm income and forget that farm income and farmers' income are not the same thing. When we add all the sources of farmers' income together it comes nearer to $19 billion.

Whereas net income is what matters to farmers, their gross income matters mightily to the rest of the economy. It is too often overlooked that farmers buy all their business supplies from gross income, and the fact they buy so much is one reason their income isn't more than it is. Farmers' *gross* income comes to around $46 billion a year. That's a big hunk of money. It

Please turn page

not only runs our huge agricultural plant but it supports the vast world of agri-business.

You've seen some of these figures before, but like the catechism, it's good for us to repeat them to ourselves once in awhile:

With part of their $46 billion a year farmers buy half as much steel every year as the whole automobile industry uses. They buy more petroleum than any other single industry. They buy an average of 46 tires per farm. They use more electric power than Baltimore, Boston, Chicago, Detroit and Houston combined.

Farmers have assets of $208 billion and around $180 billion of that is free of debt. That's a ratio of better than $7 of assets for every $1 of debt. There are a lot of big businesses that wish they could say the same.

Karl Brandt, member of the President's Council of Economic Advisers, quotes a recent estimate that farmers use four times as much horsepower in their machinery as all the factories in the country. Farmers, he says, have $18 billion invested in machinery and another $18 billion in animals. They're managing over 1-1/3 billion acres of land.

Most of us won't remember figures like these but I'm throwing a hatful of them at you anyway. If you're like I am, sometimes you have to be pounded with such figures for awhile before the immensity of what we're talking about really soaks in.

Farmers are not very important any more? Well all they do is furnish 180 million Americans with three square meals a day, plus a good bit of their clothing, to say nothting of sending great quantities to the rest of the world—some of it for money, some of it free.

And what else do farmers do?

Well, every 10 years they send to the cities nearly 2 million fine young people—completely reared, educated, ready to work. These children are trained in self-reliance, in habits of work, in wholesome family traditions. These young citizens nourish the body politic quite as truly as farmers' food nourish the nation physically.

And what about that belief that pretty soon there won't be many people left in farming? Well, I for one don't happen to believe it. It's true, only two million farm families raise more than 90% of all our farm produce. These are the full-time commercial farmers. But it's also true that there are nearly two million more out there, and who intend to stay out there, who hold two jobs, one on the farm and one in town. At *Farm Journal* we've learned not to call these people "part-time" farmers. I don't know anything that makes a man madder than to be called a part-timer just after he's put in 16 hours a day on two jobs. We have our own name for these people. We call them "time-and-a-halfers," and I think it's a great deal more accurate.

To my way of thinking the two million time-and-a-halfers are the most under-valued people in rural America. Full-time farmers look down their noses at them. Agricultural economists write them off as not counting for much. Maybe some vocational educators do. Actually they are a tremendous national asset. Not only do they do a fair amount of farming, but they furnish the best kind of labor force for industries that want to locate out through the country. They'll give you a day's work for a day's pay. When the factory has to slow down or maybe close down temporarily the time-and-a-halfers just farm. When the factory starts up again, they're there.

Perhaps just as important, they don't swell our big cities still further. I don't know about you, but I think it's an abnormal and unhealthy human phenomenon to herd a million, or five million, human beings into a sort of human beehive, or shall we call it anthill?

Well, I've taken all this space claiming farmers are still important, and that they'll stay important. You know it, of course. *But even those of us who know it need to have our faith and confidence in the future of farming restored. Moreover, we need to tell it to other people. It's urgent that we do.*

This would not only be in the public interest. It would certainly be in farmers' interest. And just as certainly it would be in your own selfish interest. For it's an obvious fact that unless people appreciate that agriculture is important they won't forever continue to think that vocational agricultural educatiton—or farm magazines either—are so very important. I claim that here is an urgent job for all of us. We've all got to help with it.

Our first job then, whether we're teachers or farm magazine editors, is to realize that agriculture is a growth industry, not some kind of shrinking apple — then to help other people realize it.

Our second task is to re-define agriculture. We need a new concept of what we are talking about. What is it made up of?

At the core of it are a couple of million full-time commercial farmers. I believe that there will continue to be more of them than some of the forecasters think. Every so often one of the experts discovers a dairy farm with 1,000 cows or a poultry farm with 100,000 hens. Whipping out pencil and paper he quickly calculates that it would take only 25,000 or some other number of thousands, of such farmers to supply all of the milk and eggs the country needs. His arithmetic is right. The only trouble is that practically it just isn't going to happen.

Family farms will get fewer and bigger but they will stay family farms. There's a limit to what machinery can do or how much of it a farmer can make pay. And when he starts hiring labor his big troubles begin. That's why our agricultural colleges find that once the average farmer (granting some exceptions) hits a certain level of operations—say 50 dairy cows—he makes no more money as he gets bigger. He handles more money but doesn't make more. And that's why *Farm Journal* editors find the biggest farms they visit are often the ones with the most problems. On the other hand they find families doing their own work and working for nobody but themselves, whom nobody is going to run out.

Who else is included in this term "agriculture?"

Well, add another two million of those time-and-a-halfers we were talking about. Then add another vast multitude of people who buy from farmers, sell to farmers, serve farmers in some way, and without whom today's farmers simply couldn't function. They are a part of agriculture, too. *Farming plus the businesses allied with it em-*

ploy 40% of the total U. S. working force!

That's what we're talking about when we speak of agriculture. What a tremendous thing it is! How tremendous it is going to continue to be.

Where does vocational education in agriculture fit in? Will there be much need for it from here on?

Well, it's obvious, isn't it, that if agriculture as we have just defined it is going to grow, the need for training the manpower for agriculture is going to grow, too. Not just because we will continue to need *many people* but because they will have to have *more and better training* than ever before. It's a truism to say that farming gets more complicated and more technical in its procedures and requires better business management every day. This will certainly continue. So, don't agricultural educators have the possibilities of a growth industry, too?

But note that I said "possibilities." The possibilities are there only if you are perceptive enough, open-minded enough, and fast enough of foot to meet the needs of the times. And times are changing fast.

I am going to tell first of what farm boys need from somebody, then get around to what vocational agriculture teachers can do about it.

The present picture is appalling and cannot continue. Farm children are getting the short end of the stick.

First of all, only 31% of farm children graduate from high school as against 54% of non-farm boys and girls. Only 24% of the farm high school graduates start college, and only 11% finish. Children of professional and business people in towns and cities do more than twice as well. And this in a time when the world demands trained, skilled people as never before, and has less need for the untrained and unskilled than at any time in history!

And how about those farm youngsters who do get to high school? How adequately are we doing by them? *By great good fortune we have had pretty decent vocational training in two major fields—agriculture and home economics. I want to say right here that I don't think we have had a bit too much, nor do I think we will need any less in the future.* But certainly that isn't all we need. Yet in rural America that's almost all we've had.

It scarcely makes sense, and let's face it, to spend such a disproportionate share of our vocational education money on agriculture when so many of our boys are going into fields which cannot even be classified as agribusiness. There are two ways to change the proportion: We can cut out some of the agriculture money, or we can add money to supply what we haven't got enough of in non-agricultural fields. I predict one or the other will happen. Which do you prefer?

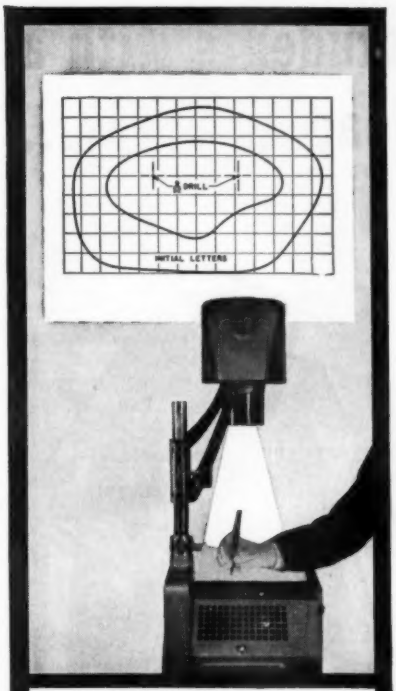
Perhaps the most urgent thing for the vocational agriculture folks to do is to join with others in a vigorous push, not just acquiescence, in building an adequate and balanced vocational program in America's rural high schools. It would be in the public interest, in the children's interest, and in your interest. That way you could get off the spot of being duck on the rock with the critics shying stones at you.

The first essential, in my estimation is a good guidance counselor. For the life of me I can't see why he wouldn't be as good an investment as a football coach. Ytt pitifully few high schools have a properly-trained guidance person. Too often the job is just handed around among the regular faculty. It's often poorly done or not done at all.

Just to fortify this talk with some fresh information, we at *Farm Journal* sent a questionnaire to some vocational agriculture students of ten years ago. They were alumni of a dozen high schools scattered over the country. We had replies from 62 men. Nine of them are full-time farmers, three more farm part time, 10 are in agribusiness fields, 36 are in occupations having no agricultural aspect and four could not be classified. Of the 36 in non-agricultural occupations we had everything from psychiatrists and ministers to airplane pilots to truck drivers and plasterers — more than 20 kinds of non-farm work in all.

Of the 62, 54 said they were glad they took vocational agriculture. They felt it had helped them in some way. That figure can't be taken too literal-

Please turn page



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ly—a moment later only 36 said they would recommend vocational agriculture today to a boy who doesn't have much chance to farm. Even so you got over half the votes.

How could vocational agriculture have been improved for these 62? Well, 37, the largest number, said by giving them more on business management, whether farm business or other. *They would add more business training* and feel that it could combine naturally with agriculture. Only 12 wish they had had more instruction on how to raise something.

Of the 62, 59 said they were glad they were required to have a farming program. And remember that only 12 are doing any farming at all now.

Obviously you have three groups of boys in rural high schools.

First there are those who intend to farm. There's no question about what you can do for those.

Then you have the boys going into some phase of agribusiness. You can do a lot for them, too. First, they will need a grounding in agriculture if they are to deal with farmers later. Businesses are desperate to find well-trained farm boys to sell to farmers, design products for farmers, buy from farmers. As one business executive told *Farm Journal*, "We're not just knocking at the door—we're practically breaking the door down." Even so they can't find enough recruits.

You can't teach your agribusiness boys everything they'll need to know later but you won't need to. Their employers will do that. But you can get them basically ready. And you can do one more thing: Show the boys the vast scope of the field. How is the average country kid ever going to find out about the possibilities unless somebody shows him? We have been mighty remiss, all of us, in this. That's where that guidance counselor comes in.

You have that big third group, too—the boys who turn into the dentists, merchants, and plumbers. Have you anything to offer them? Well I think so. Let me be a little visionary for a moment.

What would be wrong with an agricultural department in a rural high school offering in the freshman and sophomore years basic courses that anyone claiming to be educated should know something about? Shouldn't everybody know something about the plant, animal, and soil resources on which they depend for food? Shouldn't everyone appreciate the science that goes into farming? Shouldn't everyone know something of what farmers do and where they fit into the scheme of things in this country. And what about letting the ag department gear in somehow with teaching money management and business management?

Then for those boys who intend to become farmers why not provide a course of study in agricultural techniques? Such boys can use them, but there's scarcely any need of trying to load these onto students who will never need them.

For schools which would have too few advanced agricultural students, how about offering this advanced work in fewer, bigger, and better-staffed places?

If you had a program like that perhaps you would do something useful for more students. Perhaps you would waste fewer students' time on things they'll never use. And I think you would get away from the present tendency of shunting the slow learners into agriculture. What you'd offer would interest and challenge the brightest students, hence you'd get more of them.

I believe, too, that vocational agriculture can carry its adult program further than it has. The need for this will grow, not decrease.

Finally I hope you can find more ways to give agriculture stature, to make boys proud to be connected with it, to glamorize it if you please. FFA is doing a tremendous job in this direction. We need all we're doing there and still more. Can we have more public recognition of farming as the "noblest of the arts" and the very acme of science in a science age? Let's not be satisfied with what we've done. Let's find ways to go further.

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On April 4, Dr. Sterling M. McMurrin was sworn in as U. S. Commissioner of Education. Brief ceremonies were held at the Department of Health, Education, anl Welfare. Dr. McMurrin (right) was sworn in by Supreme Court Justice William J. Brennan, Jr. (left) as Secretary of HEW Abraham A. Ribicoff looked on. AVA Executive Secretary M. D. Mobley and Lowell Burkett, assistant executive secretary, attended the swearing-in ceremonies.

Selection

From Page 17

in a class whose students have in general the same educational experience background and approximately the same potential to learn. The instructor can provide one level of instruction that meets the needs of his class rather than trying to provide instruction for wide varieties of background and capabilities in a single period of instructon.

Another very important aspect of a good selection process as it applies to classroom instruction is that which could be called the mental hygiene of the instructor. If the selection process is working effectively, the teacher can expect students to succeed. He can expect to see progress. To a teacher nothing is more discouraging than to face a class where he feels certain that his objectives cannot be achieved, or where his objectives can be achieved with only a few students.

The benefits of a good selection program to the classroom or shop instructor are threefold: indication to him where to start teaching to avoid lost motion, assurance of a reasonably homogeneous group so that learning experiences appropriate for the level of the class may be provided, and provision for a successful and rewarding teaching experience for the instructor.

In summary, let us restate the three major aspects of a student selection program. A good selection program is concerned with the welfare of the student and, therefore, of the school. Second, to be effective a good selection program requires clear understanding and evaluation of objectives, and, third, it provides an improved atmosphere for instruction. The end result must surely be improved quality of instruction.

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DISTRIBUTIVE

D-5

A Milepost and a Guidepost

Mildred Jackson

Georgia Department of Education

Section D-5 in the *Evaluative Criteria, 1960 Edition,* is designated Distributive Education. According to John A. Beaumont, Director, Distributive Education Branch, U. S. Office of Education, "Acceptance of Distributive Education by the National Study of Secondary School Evaluation into its criteria was the greatest single achievement of the service in 1959."

It is significant that the criteria for distributive education were accepted and included in the National Study at a time in history when the eyes of all America are on education, and the focus in secondary education is on the pursuit of excellence in the comprehensive high school.

The establishment of standards for secondary schools has been a gradual process. As early as 1885, colleges and some secondary schools were wrestling with the problem of standardizing college entrance requirements. With this hurdle passed, the association of colleges and secondary schools took up the task of raising educational standards. A set of minimum standards was developed and became the basis for our system of accreditation. In 1933 the National Study of Secondary School Evaluation addressed itself to influencing a change from maintenance of minimum standards to the striving for excellence in all aspects of a school's work.

The evaluative criteria for distributive education mark an important milepost in our development. It attests to the vision and cumulative work of many distributive educators during a quarter of a century. It signifies the transition from a course of study offered in public high schools to an instructional program on three levels—high school, post-high school and adult—whose core is marketing and merchandising of goods and services. It identifies the distributive education program as a cooperative enterprise using both the facilities of the school and the marketing and merchandising resources of the community to provide opportunities for testing basic concepts in practical situations.

As a guidepost, the criteria provide a structural framework within which distributive educators can work and grow, and point the directions we must take if we are to meet the challenge of this decade in distribution.

And what are these directions?

Organization. The program of distributive education is based upon the finding of employment opportunities in marketing and merchandising in the area served by the school. It requires the assistance and cooperation of the school and community in planning and development. It provides for students who want such training and who can profit from its correlation of classroom instruction with work on the job. Both are designed to enable him to achieve his career objective.

Instruction is based upon the career objective of the student; an analysis of instructional needs of individuals engaged in marketing and merchandising; the development of a knowledge of the function of distribution in our economy; the economics of distribution and the needs of the community. The curriculum includes a study of the kinds of organizations performing the distributive function; a study of marketing including wholesaling, retailing, buying, selling, and pricing; a study of factors affecting marketing including advertising, display, locations, and layout; a study of the various financial aspects of distribution including capital structure, credit, and records, and a study of the consumer in the marketing process. The curriculum provides for the correlation with other subject-matter such as English, mathematics, art, as well as other vocational fields, supervised work experience in line with the career objective, and an understanding of the responsibilities of distribution in a competitive economic system.

Physical Facilities should provide sufficient space to meet curricular and enrollment needs and an adequate quantity and variety of equipment to meet these needs including a teacher area with desk, files, and availability for counseling with students; movable tables and chairs; adequate and conveniently arranged storage for materials and equipment not in frequent use; a classroom located near a building entrance for ease in transporting display materials and for use by adult classes; and other equipment to meet the specific and unique needs of the students such as visual aids and projection equipment, display counter, display case, telephone, typewriter, etc.

The Direction of Learning prescribes the preparation of the teacher-coordinator, describes instructional

activities and materials, and points out the value of evaluation.

The well-prepared distributive educator has preparation in such fields as economics, marketing, management, finance, credit, salesmanship; has preparation in the methods of teaching distributive education; has had wage earning experience in the field of marketing and merchandising; has preparation in such related areas as vocational guidance, job analysis, and occupational information; and has preparation in such general education subjects as English, mathematics, social studies, etc.

In addition he has developed good relations with the business community, maintains an interest in activities of business organizations and an active interest in professonal advancement, including participation in educational organizations. He also participates actively in in-service education through formal study and other professional activity.

Instruction in D. E. contributes to the school's objectives and is directed toward comprehensive career objectives. It gives evidence of careful planning and preparation for classroom work and utilizes business resources of the community for supplemental instruction. Instruction is adapted to the needs of individual students. Students help plan classroom activities. The job description prepared for each student is used as a basis of instruction both on the job and in the classroom. Experience on the job are used to develop understanding of theoretical instruction presented in the classroom. Instruction includes basic concepts for all students in addition to specific instruction related to the student's occupational specialization. The job assignment is correlated with the student's aptitudes, interests and abilities. Attention is given to the development of positive attitudes and a sense of personal responsibility toward the job assignment. The teacher-coordinator visits the home of each student and frequently visits the student's place of employment.

Instructional materials are kept up to date. A teacher's file of supplementary materials, including product information, is maintained. Such materials as business forms, handbooks, training manuals, charts, maps, posters, and display materials are available. Course outlines and study guides are used and reference materials provided. Self-study materials are available to use in connection with specific instruction needed by students. Appropriate audio-visual aids are available.

Evaluation activities are an integral part of instruction. Individual progress is recorded and used for guidance and instructional purposes. Business progress as well as classroom proficiency is used as a basis of student evaluation. Evaluation of buiness progress is made in terms of requirements of the cooperative job of the student as well as in terms of career objectives. Follow-up studies of enrollees are used to evaluate educational outcomes.

The degree to which distributive education graduates exhibit skills and attitudes necessary for distributive occupations, develop knowledge and understanding necessary for success in distributive occupations, the extent to which they have developed moral and ethical standards related to distributive activities, the breadth of their information about the opportunities in the field of distribution—these are the measures of the effectiveness of the distributive education program.

Implications of the Evaluative Criteria for distributive educators are many. Immediately, there is the need to take a critical look at our current programs and determine how they measure up to the specifications for an adequate program of distributive education in the Sixties. The emphasis on marketing and the economics of distribution focuses the attention on our institutional and in-service training of teachers . . . and may indicate a need for redirection in technical preparation as well as revision of the secondary school distributive education discipline.

While the addition of the Evaluative Criteria for Distributive Education to the National Study should not be interpreted as placing pressure on any school to provide for this area in its program, the criteria become an excellent instrument of public relations. Particularly is this true in use with school administrators, faculty members, legislators and others who find difficulty in understanding the place of distributive education in the secondary school curriculum.

These criteria afford us a functional tool for meeting the challenge of the Sixties in distribution. Our goal—an adequate program of distributive education—is well defined. The guideposts along the way are unmistakably clear. Where we go from here is up to you and to me.

REPRINTS AVAILABLE

Vocational Education and the National Need from the January, 1960, Journal: 5 pp., 50 copies for $3.00

Industrial Arts from the September, 1960, Journal: 16 pp., 50 copies for $8.00

New Era for Vocational Agriculture from the March, 1961, Journal: 16 pp., 50 copies for $10.00

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1-103

BUSINESS

Building the Business Curriculum

H. G. Enterline
School of Business
Indiana University

THE TERM "curriculum" is being used here in a somewhat restricted sense, referring specifically to an organized sequence of courses and other related learning activities designed to achieve a particular educational objective. In business education, the educational objective is usually vocational in nature. However, in some instances the end objective may be somewhat broad in nature so that it could refer to the attainment of unspecializzed business knowledge and economic understanding with the thought that specialization will follow, either through later formal study or on-the-job training.

Broadly speaking, there are two approaches to building a business curriculum—or any other curriculum for that matter. One approach is that of planning a loosely structured curriculum; the other is that of building a tightly structured curiculum.

According to the loosely structured approach, relatively few courses are absolutely required. Essentially the curriculum is individually planned in terms of each student's particular objective. Such an approach is entirely workable *provided* that counseling service of the highest order is available to each student. Actually relatively few, if any, schools are equipped with this kind of counseling service. Consequently when the loosely structured approach to curriculum planning is attempted, what usually results is a kind of educational smorgasbord. Everything is on a more or less elective basis. (An analogy: giving young children the privilege of making unrestricted selections from a restaurant

menu.) If students, young students particularly, are given an unrestricted opportunity to elect courses in an educational institution, educational indigestion may result. Just as the planning of a meal involves balance, so must the curiculum, business curriculum or otherwise, represent a balanced educational effort.

On the other extreme is the tightly structured curriculum in which the student has no, or relatively few choices. The situation is comparable to that of taking meals at a boarding house where the meal is fixed. While a balanced diet may be maintained, the meals may not always be too palatable due to the lack of provision for individual tastes. A similar situation prevails in an educational institution which permits no electives.

Both points of view represent extremes, of course, but if a choice had to be made between a loosely structured curriculum and a tightly structured one, the latter obviously would be the better choice since the attainment of the educational objective is reasonably well assured. Ideally, some choice of electives is desirable, and some diversity of curriculum offerings is needed in order to provide for individual needs.

This presentation is concerned primarily with the basic framework for building a well-balanced business curriculum. Reference is being made primarily to the secondary-school business curriculum, although with slight modifications the basic framework presented could be adapted to building a business curriculum in a private business school or in a collegiate school of business.

All thinking business educators concur that a well-planned curriculum requires a balance of vocational business education and of basic business education. It is assumed that the curriculum is built upon a broad base of general education. There are, of course, differences over specifics.

All likewise concur that vocational business education involves two broad areas of preparation: (1) training for office occupations, and (2) training for distributive occupations. All likewise agree that vocational preparation involves more than the mere development of business skills; that accompanying such preparation there need to be adequate and proper kinds and amounts of related learnings, occupational intelligence, or whatever specific term is used to describe "vocational preparation plus." All likewise concur that every individual needs to have a fundamental knowledge of our economy, that all individuals develop competency in dealing with personal money management problems, and that the well-planned business curriculum will include work in this basic business education area.

The problem then is that of setting up a business curriculum which includes all of the foregoing important ingredients. Essentially the problem is not too difficult if one had X number of semesters in which to accomplish the task. But tradition, legislation, and logical principles and practices restrict both the amount of time available and the proportion of the total amount of the study program which may be applied to a particular area of learning.

With these considerations and limitations in mind, therefore, the framework for a well-balanced business curriculum resembles the pattern in the diagram below.

An introductory basic business course, commonly referred to as General Business, is required. This provides a background for the study of advanced business courses, acquaints the student with business terminology, and gives the student some comprehension of the nature of business occupational opportunities. At the same time it aids in the development of money management competency. It is generally agreed that such a course should be required of all business majors and that it should be effective for other students as well. The course is particularly valuable for drop-outs since this is the last opportunity for such students to gain some ability in money management competency through their formal education program.

The curriculum is concluded with an advanced basic business course. The course, or courses, serves two broad purposes: (1) it integrates and unifies all business-economic learnings to date, and (2) it provides orientation for dealing more effectively with the economic problems of adulthood. It must be remembered that approximately two-thirds of all students who enter high school terminate their formal education prior to high school graduation or with high school graduation. The advanced basic business course, therefore, needs to be required of all business students to provide the

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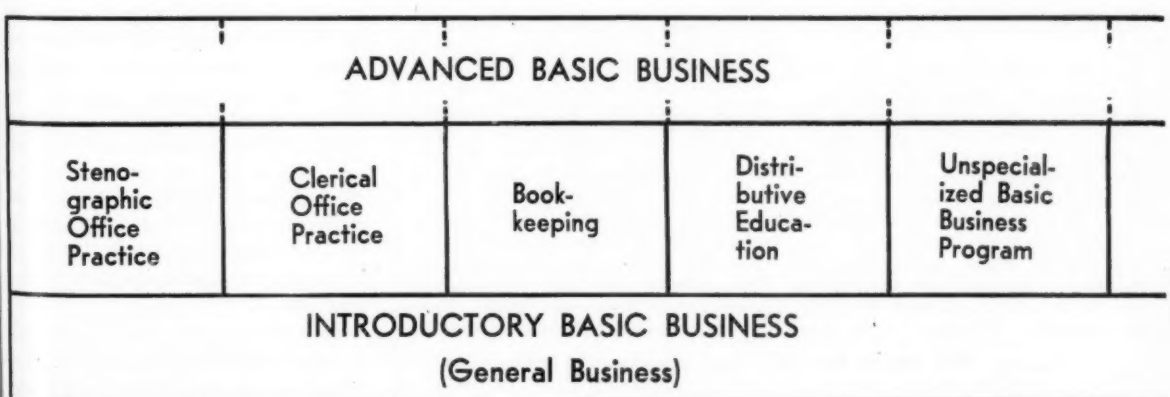

SHORTAGE OF SKILLS

It Grows Despite Unemployment

FOR U. S. industry, the rise in unemployment to new highs last week underlined a startling paradox: all around the nation, even in such critical jobless areas as Detroit, jobs are going begging for lack of skilled workers to fill them. Industry is hard put to find enough trained craftsmen, but the problem is getting worse. For every 100 skilled workers that the nation had in 1955, it will need 122 in 1965 and 145 in 1975. Yet the nation's spotty training programs are not even turning out enough new craftsmen to replace those who retire. Automation and such new industries as electronics have vastly increased the demand. What can industry do to fill it?

A number of companies have tried apprentice programs. They put high school graduates through paid training programs in their shops and send them to school several hours a week for classroom studies. Companies such as General Electric, General Motors, Ford and International Harvester try to get the top graduates from high schools and give them an engineering education that comes close to what they would get in college. Entrance requirements are high; Harvester says it turns down nine out of ten who apply. Applicants who are admitted get a four-year course in advanced mathematics, hydraulics, electronics and similar subjects—plus training in the shop. The program pays off: 75% of the students who took the course are still with the company.

But such programs will train only one-tenth of the craftsmen needed for the '60s. The Government supervised widespread apprentice programs right after World War II, but enrollment has dwindled from 400,000 to 160,000. In industrial Massachusetts, where the need for skills is vital, the Labor Department's regional director of apprentice training, Hubert Connor, has only 4,000 in his apprentice programs. "That's terrible," he says. "We should have 18,000. Industry and labor don't seem to realize the tremendous need that exists now, and will exist in the future, for skilled help."

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One difficulty is that students lose interest in lower-paid training jobs when they see they can make more money in the short run as laborers. Managerial apathy is also a big factor. A Labor Department study of employee training in heavily industrial New Jersey showed an average of only 16% of the companies with any kind of program.

An obvious source for skills would seem to be vocational high schools, but many a businessman hesitates to accept their graduates. President George Prezembel of Chicago's Midwest Machine Co. says: "It's all pretty sad. If you show them where to drill a hole, they can usually do that; but if their drill needs regrinding, they are stuck."

The reason for such disdain is that too many vocational high schools are of the kind described by Director James Goode of Dallas Vocational School: "We handle delinquents, truants, troublemakers, boys with 'low normal' IQs, the ones who have dropped out of regular school programs. We produce the buck privates of industry." Industry does not want them any more than the schools do.

•

Another problem is what the schools should teach. Many industrialists and union leaders want faster action in turning out men to run specific machines in specific plants. Others argue that in the long run such specialization is unsound. A student might be trained to operate one plant's complex machine, but where does he go when the job and the machine become obsolete? Retraining such workers is hard because they often have to change from a physical skill to a technical skill. In this technological age, what is needed, says Dr. Maurice F. X. Donohue, dean of the University of Chicago adult education division, "is the more broadly educated individual. Once able to think, he can teach himself to adapt to the specifics."

A number of vocational school systems, encouraged by local industry, have already started to change to meet the new requirements. Miami wiped out its old vocational schools, started a Comprehensive Shops System that mixes training in applied electronics with the usual courses in history and math. High scholastic requirements give the schools new prestige. In Chicago, Vocational School Assistant Principal Frank J. Daily says: "We have completely upset the idea that only stupes go to vocational schools. It is now recognized that a poor student is a poor craftsman."

Cleveland's School Superintendent Mark C. Schinnerer believes that vocational high schools are on their way out altogether: "The need is for a system of junior colleges and technical institutions providing training for industry advanced well beyond high school level. Industry today is demanding greater skills than we can produce in high schools."

One big obstacle to all training programs is the prevailing view among parents that a blue-collar technician has a less desirable job than a white-collar worker, even if he earns more money. Industry has done little to counteract this.

Courtesy TIME (March 10, 1961); copyright Time Inc. 1961.

kind of balance described above. Likewise, it should be open to non-business students who terminate their education with high school graduation and to college-bound students — particularly those who plan to major in business or economics on the college level.

The advanced basic business course referred to above is commonly offered according to one of three different plans: (1) as two one-semester courses such as business principles, consumer economics, economics, economic geography, salesmanship (a general course), and business law; (2) as a "selected units" course in which students and teacher working together decide what units are of greatest concern, and then the two, three, or more books which give the best treatment of these materials are used as basic texts and reference materials; and (3) as a "problems" course, which is unstructured, wherein students working under the careful direction of the teacher in the first few weeks decide what problems are of greatest concern, and then use whatever text and reference material have a bearing on the problem.

The curriculum maker will be aware of other variations in practice in offering both the introductory basic business course and the advanced basic business course. In any event a maximum of two units of credit would be needed to offer the all-important basic business-economic material so essential in a well-balanced business curriculum.

Upon this base of business-economic understanding are built the various areas of vocational concentration. A basic principle to be kept in mind is that there needs to be enough concentration of work in one particular area so that the student will develop sufficient competency to obtain a satisfactory beginning position in business upon the completion of the curriculum. Assuming that a maximum of six units of credit in any area of study may be applied toward graduation, according to the plan suggested above a minimum of four units of work may be used to develop vocational competency in some one area.

On the diagram are shown four common vocational concentrations in business: stenographic office practice,

clerical office practice, bookkeeping, and distributive education; with an additional non-specialized program in basic business education. The right side of the diagram has been left open intentionally to illustrate that in some situations other or additional areas of concentration may be offered. It is likewise possible that in a smaller school - community situation facilities and employment opportunities are such that not all five of the curriculum concentrations can be offered; so that the four, three, or two curricula which best meet the needs of the students in a particular school-community will be offered. However, in all cases, except in the very small high school where the facilities and number of students are such that no business curriculum, as such, can be offered at all, at least two curriculum paths need to be provided in order to allow at least this much diversity of business education opportunity.

Although the retention rate of students has gradually increased over the years, educators who have given careful study to the situation believe that while the number of persons attending college will continue to increase, the percentage of those doing so may level off, or actually decrease, due in part to a tightening up of college entrance requirements.

In either event the responsibility of educators in the secondary schools to provide the best kind of education for the masses of students who terminate their formal education in high school is great. As a consequence those responsible for business curriculum planning in the high school need to examine their curriculum provisions with great care to be sure that students who do study business are equipped with a high degree of vocational competency, with the basic knowledge needed to manage their personal business affairs, and with a healthy comprehension of our business-economic system. This objective can be realized only by requiring students to follow carefully planned business education "menus" rather than allowing them to take courses on a free elective, catch-as-catch-can basis, or by restricting offerings primarily to courses which teachers prefer to teach.

WORCESTER BOYS' TRADE HIGH SCHOOL
Worcester 5, Massachusetts

March 21, 1961

Mr. Henry R. Luce, Editor-In-Chief
Time Magazine
Time & Life Building
Rockefeller Center
New York 20, N. Y.

Dear Mr. Luce:

Because I, along with many others in the field of vocational education, as well as our fine industrial friends in the Worcester area, are perplexed by the contents of the article "SHORTAGE OF SKILLS," as published in your issue of March 10, 1961, we wonder just what was the purpose and why the article neglected facts favorable to our program.

Your news reporter, Mr. Cray, from the Boston office, spent a full day in Worcester studying the operation of my school and interviewing the proper officials of the Heald Machine Company, a subsidiary of Cincinnati Milling, and one of Worcester's most successful machine tool firms. Mr. Cray was very much impressed by what he saw and was exposed to unusual enthusiasm by the Heald Machine Company, 18% of whose employees have attended either our day or evening programs. Presumably, Mr. Cray wrote favorable impressions, but your editorial policies did not consider them important.

At no time did we expect that our school or any of the individuals involved would be mentioned in the article, but it would have been nice if a short paragraph had been added to the adverse publicity given by President George Prezembel of Chicago's Midwest Machine Co. A simple statement "On the other hand, some of the industrial firms of Massachusetts have had very satisfactory results in dealing with trade schools."

The place of our institution in the Worcester economy was emphasized just the other day when Mr. Edward L. Clifford, President of Worcester County National Bank and its seventeen branches, told the City Manager that immediate steps should be taken to increase the facilities of Worcester's only skilled tradesmens' training center, Worcester Boys' Trade High School, and its affiliate, The Worcester Industrial Technical Institute.

It was the writer's privilege to attend a recent dinner meeting of the Worcester Chapter, American Tool Engineers Society, and it was an inspiration to learn that one-third of the sixty-five men present, all of them from prominent industrial firms, were graduates of this school. Several are enjoying an executive capacity. The question, then, is what interest has Time Magazine in facts which are inconsistent with some sample opinions taken throughout the country? Cleveland's School Superintendent Mark C. Schinnerer is quoted and he is apparently not completely informed.

Yours very truly,

/s/ Walter B. Dennen
Director

WDB:B

INDUSTRIAL ARTS

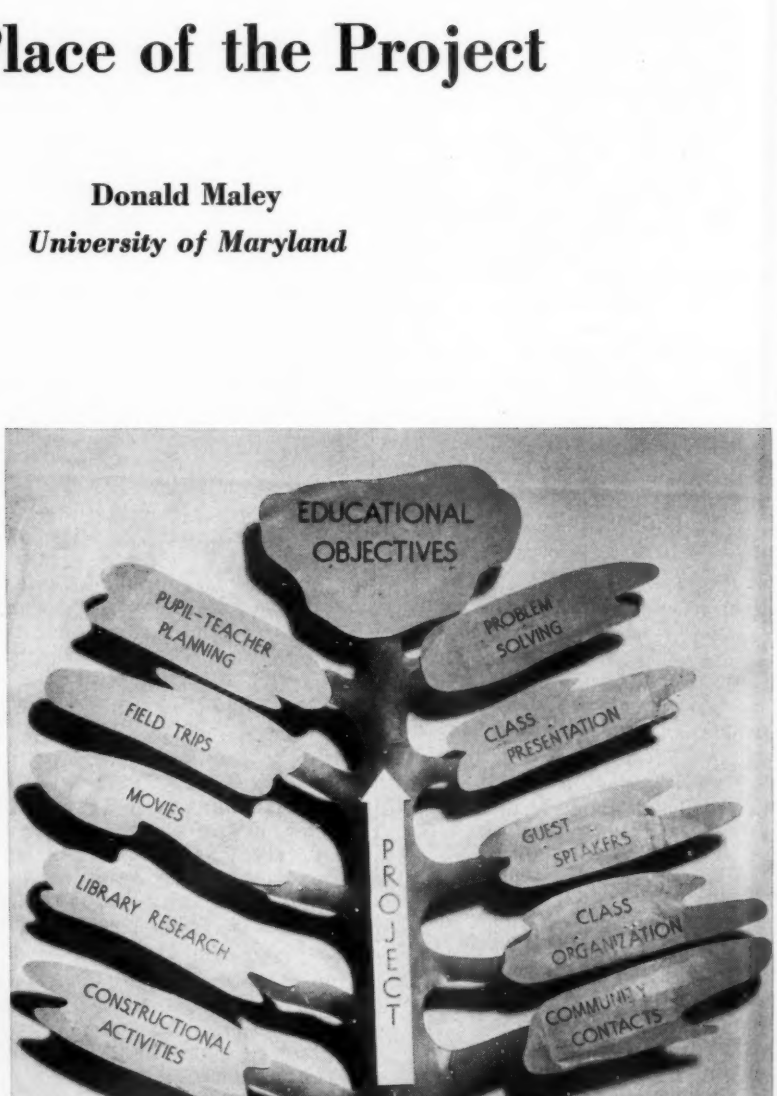
The Place of the Project

Donald Maley
University of Maryland

THE PLACE of the project in industrial arts should be directly related to the outcomes that one might expect from industrial arts. It is fundamentally an issue of means and ends. In many instances the project appears to be the tail wagging the dog that has lost its sense of direction. This fact is in evidence by the ever-obvious search for projects on the part of many teachers and leaders.

One thing appears to be fundamental in the issue under discussion. The teachers must clearly define what he or she expects the learner to achieve. Herein is certainly a major stumbling block to many teachers. However, once the desired outcomes are established, it is then imperative that the teacher devise, select or arrive at some procedure by which these goals can be attained. Just as a carpenter selects the proper chisel, plane or saw for a particular operation, the teacher must be creative and ingenious in his developing *experiences* that will achieve the purposes of truly educational programs.

To put it another way, what are the experiences that the particular learner needs to enable him to attain a given objective? The profession would do well to redirect its actions in the direction of experiences selected with the



learner in the spotlight rather than have "projects" and "things" as the centers of focus.

This would necessarily demand that the industrial arts teacher examine some of the ancient, untested hypotheses; that a single project activity is the answer to the needs of all youngsters, that a pupil in industrial arts must take something home, that youngsters are not capable of such activities as planning, creating, and organizing.

In another respect, the profession would do well to consider the *shop, drafting room or laboratory as an environment.* The task of the teacher would be to set up an environment (physically, socially, and psychologically) in which learning is encouraged and stimulated through experiences that have point and purpose. And, incidentally, the form and nature of the project that develops would be directly related to the point and purpose.

It is possible to conceive the project (whether it be in the form of a group endeavor, experiment, line production, unit, individual project, etc.) as the thread of interest and stimulation around which pupils achieve maximum attainment. The project may become the trunk of an "experience tree" designed to incorporate within its majestic structure a range of educational activities suited to individual growth and optimal technical, intellectual, social, emotional and physical development for all.

A major factor in the current "project practices" has been the teacher, education background of the profession. Teacher-education programs have placed an almost unbelievable emphasis on the making and constructing of things as compared to the development of understandings related to the general education values of industrial arts and more specifically the makeup and operation of modern industry. Present project activities appear to be more related to an industry typical of the days of Paul Revere and Samuel Slater than the line production, automated, electronic era in which the school functions.

No single item in the history of industrial arts teaching has been so retarding and restraining as the grossly exaggerated power and prestige vested in the traditional form of project. It has developed and maintained a concept of industrial arts that puts showcases and things ahead of people and pupil growth.

It appears that there is need for a broader concept of the term "project" with an emphasis in the direction of increased educational effectiveness. It is suggested that "experiences in education" be given consideration as a possible substitute for a project-emphasis program that persists by the bonds of tradition, ease of operation, administrative efficiency, and easier teacher supply.

USDA Publishes Market Guide

When a farmer turns on his radio or picks up his newspaper, one of the first things he wants to hear or read is market news. And he is among the first in the nation to receive this news of prices, supply, and other maraket conditions on farm products. It was for farmers that government market news services were established more than 45 years ago. These services now disseminate to farmers and food trades current market information on all major farm commodities collected by more than 200 Federal and Federal-State market reporting offices.

The story of these services is told in a bulletin *Market News* recently published as Volume 10 in the Major Statistical Series of the U. S. Department of Agriculture. This new publication tells of the origin, purpose, development, and operation of the market news services. It also outlines the evaluation and improvements needed to adjust the news collection program to fit the changing marketing patterns, and some recommendations for improving market news on the various commodities.

Vocational agriculture teachers may obtain copies of this publication without charge from the Office of Information, U. S. Department of Agriculture. Washington 25, D. C.

AVA EXECUTIVE COMMITTEE MEETS IN WASHINGTON

The AVA Executive Committee met in Washington on April 12, 13, and 14 to chart the course of the Association's activities in the next year. This is the first time the group has met in the Capital. From the left: F. J. Konecny, Trade and Industrial; Miss Louise Bernard, Distributive; Charles W. Sylvester, Treasurer; Mrs. Rosa Loving, Home Economics and President-Elect; William B. Logan, President; E. M. Claude, Past President; M. D. Mobley, Executive Secretary; R. C. S. Sutliff, Agriculture; and John A. Jarvis, Industrial Arts.

from the Public Information Committee

Time for Reemphasis of Education for Useful Work. Lincoln said: "Educated people must labor." Those who agitated successfully for the passage of the Smith-Hughes Act had a great deal to say about education for useful work. Education for work still has an appeal to the American public.

Dr. Robert J. Havighurst of the University of Chicago and Dean Lindley J. Stiles of the School of Education, University of Wisconsin, have set forth the need of productive work for "alienated youth," that is, for youth who are not growing up in a satisfactory way, in the April, 1961, issue of the *Phi Delta Kappan*.

Dr. John W. Gardner, President of the Carnegie Foundation, has written in his current book, *Excellence:* "The best-kept secret in America today is that people would rather work hard for something they believe in than enjoy a pampered idleness."

We need to remind the American public that one of the basic drives of human beings is toward being considered needed and useful. We remove the possibility of satisfying this urge from large segments of our youth. Many older people share with many youth a deep-seated sense of uselessness.

On another occasion, Dr. Havighurst has said: "In American society, lifework is the most important single thing about a man. He has been taught to evaluate his worth to society, and sometimes his worth in the sight of God, by the level of his occupation and the quality of his performance in it."

Those who deprecate and depreciate vocational education are the ones who are out of step with American culture, traditions, and values, not we who advocate it.

We may well appeal to the traditional American commitment to useful work for all in presenting the case for vocational and practical arts education, certain that we shall evoke a favorable response. We may well raise questions as to whether current types of education are predisposing and preparing for the many kinds of work essential if we are even to maintain what is worth maintaining in our present way of life.

Have We Blurred Public Understanding That Vocational Education Prepares for Useful Work? When vocational education was introduced into our schools, there were widespread expectations that it would prepare for specific, useful occupations. But we put a large part of our "vocational education" into the high schools, providing it for immature students with uncertain vocational goals. Vocational agriculture in the high school leads to farming and other agricultural occupations for about 40 percent of those who enroll. For the majority of students, it is a phase of college preparation or general education. At the high school level, there is often little difference between "vocational homemaking" and general home economics.

As we develop programs beyond the high school, and particularly as we provide education for particular technical occupations, we can clarify public understanding of the true nature of vocational education.

We should identify practical arts education as practical arts education, not call it "vocational education" because vocational education is aided with state and national funds. The practical arts, work experience, and occupational counseling have important roles in our schools, and they are a part of education for useful work, but they do not provide "vocational education."

Conversely, we should not give the public the idea that vocational education, properly defined, is all there is to education for useful work. Education for work is a function of a school system, not the function of a vocational department in a school system. This kind of education begins in the kindergarten and continues through adulthood. It may be found in many parts of a school system.

A school system that it not providing it adequately is failing to serve American needs and ideals. We should not be hesitant in pointing out the essentiality of education for work. The American people will back us.

On April 8 the AVA cited General Electric Company with its national Award of Merit. G-E was the only organization to receive its national award for 1960. The citation said G-E's "interest in and support of vocational education . . . has meant much to the welfare of our nation". It was presented by the Association's New York State branch at Elmira, N. Y. Left to right are C. Thomas Olivo, chief, Bureau of Vocational Curriculum Development and Industrial Teacher Training, N. Y. State Education Department; Joseph B. Stazinski, plant manager, G-E Foundry at Elmira, who accepted for the company, and Elliott H. Johnson, president, N. Y. State Vocational and Practical Arts Association.

new books

Goodheart-Willcox, 1322 South Wabash, Chicago 5, has announced the availability of five of their nine new general shop texts. Four more will follow in short order. Those ready for distribution now are:

Woodworking by Willis Wagner (Iowa)
Drafting by Walter Brown (Missouri)
Electricity by H. H. Gerrish (California)
Electronics by H. H. Gerrish
Leathercraft by Fred W. Zimmerman (Ill.)

Those on their way are Metalworking by T. G. Boyd (Missouri), Graphic Arts by Fred D. Kagy (Colorado), Art Metals by C. V. Siegner (Colorado), and Power Mechanics by Pat H. Attleberry (Washington). School price per copy is $1.76 and list price is $2.35.

These texts contain about 100 pages apiece, are all cloth-bound the same size, and are loaded with excellent pictures and drawings. Each is a first or exploratory course which teaches basic principles. They are well suited for use in general shops taught by one teacher or in rotating general shops taught by several teachers. Basic content of each text may be taught in nine or ten weeks, but sufficient content is included for one semester or more. Texts include instructors guides and answer keys.

Is the Fashion Business Your Business, by Eleanor L. Fried, 2nd Edition, Fairchild Publications, Inc., 7 East 12th Street, New York 3, N. Y., 1961, 270 pp. $5.50. This book was originally published in 1958 to outline the wide range of career opportunities open in all branches of the fashion industry in the United States. Mrs. Fried has had extensive experience in guiding people into successful fashion careers. In her book she explores all phases of the industry—designing, merchandising, planning and promotion, publishing, engineering and management of apparel production. Her case histories show how both men and women have found their own niche in the industry and succeeded. This second edition includes a brand-new chapter on the essential qualifications chief executives look for when hiring company officers. It also discusses the various techniques for "executive" job hunting.

Woodworking for Everybody by John G. Shea, D. Van Nostrand Company, 1961, 219 pages, $6.25. This Third Edition of a best-selling book has been completely revised. It might better be called "Wood and Everything About It" because it covers the subject about as thoroughly as any we've seen. It's profusely illustrated and includes dozens of projects for industrial arts classes as well as the do-it-yourselfers. It includes a chapter on the latest power tools and equipment to come on the woodworking market.

Essentials of Mathematics by Russell V. Person, John Wiley & Sons, 1961, 646 pages, $7.00. Arithmetic, geometry, algebra, logarithms, and trigonometry . . . this order of presentation was chosen by the author because he feels it best brings out the logical and practical interrelation of these basic subject areas. This is an introductory textbook for students preparing for various fields of technology. Its selection of topics, order, and method of exposition are all directed toward one specific goal: to provide the kind of mathematical background that will be of greatest value in later technical study. (It has already proved of value to your editor, who needs mathematics explained simply, directly, and practically.)

Guide to Better Schools by J. Lloyd Trump and Dorsey Baynham, Rand McNally & Company, 147 pages, $1.25 for single copy, volume discount from publisher (P.O. Box 7600, Chicago 80, Ill.). Here is a paperbound book which deserves not only special mention but also commendation for a job well done. Behind the concept and execution of this study are these organizations: National Association of Secondary-School Principals (a department of NEA), The Fund for the Advancement of Education, and the Ford Foundation. Mr. Trump and Miss Raynham literally put years into its production. They have subtitled their book "Focus on Change" and have directed it totally towards the future of the American high school. "Must" reading for educators.

Simplified Calculus by F. D. Westwater, The Macmillan Company, 1961, 160 pages, $3.50. This book is an original, comprehensive approach to the once complicated (once terrifying) subject of higher mathematics. By writing with unusual clarity and informality the author demonstrates that calculus can be learned with a minimum of effort. Ideas are developed gradually, and graphic illustrations are introduced wherever possible. The symbols of calculus, often a stumbling block to the beginner, are presented in clearly defined stages which allows easy grasp of the material.

Modern Trigonometry by Hall and Kattsoff, John Wiley & Sons, 1961, 236 pages, $4.95. This text uses the analytical approach and emphasizes the ability to reason about the trigonometric functions. Rectangular and polar coordinates are introduced at the beginning and treated simultaneously throughout the text. The authors say that this book will develop maturity of insight into the techniques as well as the ideas of trigonometry without stressing one to the disadvantage of the other.

Home Economics as a Profession by Mildred T. Tate, McGraw-Hill Book Company, 1961, 432 pages, $5.50. This is a "comprehensive text" on home economics and covers the total profession. It differentiates the various areas of the field as to function, scope, and training and experience needed. The book also includes the history of home economics, helpful federal legislation, and professional organizations. Ways and means by which home economics students may orient themselves in the field are also given. Both graduate and undergraduate preparation is described.

Engineering Drawing and Geometry by Hoelscher and Springer and recently published as the Second Edition by John Wiley & Sons sells for $8.95. It contains 611 pages. Let the authors describe this book: "We have had in mind throughout the preparation of this edition several very definite objectives that have been approved by authorities in this field. These may be stated as follows: 1. To provide a textbook so clear that it can be easily understood by the freshman student; 2. To make a textbook which presents the best in drafting practice but emphasizes the development of the reasoning process in its theoretical discussion rather than manual skill; 3. To provide the necessary material in one textbook to cover adequately the work in basic drawing courses, fundamental descriptive geometry; advanced courses for sophomores in the professional computation; 4. To present the material in fields, and fundamental work in graphical imagination, develop visual perception in such a way that it will stimulate creative three dimensions, and promote original thinking."

Household Equipment by Louise Peet and Lenore Thye, John Wiley & Sons, Inc., 1961, 357 pages. This is the fifth edition of a standard guide to household appliances and machines. Nearly all of this book has been rewritten, however, and most of the illustrations are new to show the latest types of equipment. Dr. Peet of Iowa State University and Miss Thye of the U. S. Department of Agriculture provide the basic knowledge needed by the woman in the home to evaluate and determine what changes are necessary for the most efficient household. The book covers selection, care, arrangement of household equipment. This new edition also discusses floor covering materials, air conditioning, and characteristics of synthetics.

Supermarketing by Frank J. Charvat, The Macmillan Company, 1961, 276 pages, $6.95. Here is a detailed study of the dynamic supermarket industry—its development, operational features, and influences on food sales. Mr. Charvat discusses the internal and external factors that have contributed to the amazing growth of supermarkets. Features such as buying and selling, pricing, expense control, profit relationships and investment requirements are given special emphasis. Here is a book which will have great interest for four vocational education fields.

How to Choose and Use Power Tools by R. J. DeCristoforo, Arco Publishing Company, 1961, 144 pages, $2.50. This is about as basic a how-to book as you'll find, but it's a good buy if only for its coverage and

Please turn page

brevity. It's aimed primarily at the home shop enthusiast but it also should hold great value for the beginning school shop student. One of the nicer features is the description, illustration, and uses of shop tools frequently advertised in the *Journal*.

Dictionary of Mechanical Engineering by Alfred Del Vecchio, Philosophical Library, 1961, 346 pages, $6.00. From "abrasive" to "zones" this comprehensive dictionary and sourcebook presents prime definitions in the fields of architecture, automatic controls, engineering mechanics, fuels and combustion, basic electricity, basic mathematics, and welding. It should be valuable to engineering students and teachers as well as skilled workers. The author is Associate Professor and Director of Mechanical Engineering at Manhattan College.

A Preliminary Summary of a Study of Home Economics in Secondary Schools of the United States, 1959, by Beulah I. Coon, formerly Research Specialist for Home Economics Education, is now available, without charge, from the Home Economics Education Branch of the Office of Education, Department of Health, Education, and Welfare, Washington 25, D. C.

This 6-page leaflet brings together some of the principal facts gathered from a questionnaire survey of a random sample of secondary schools in 50 states and the District of Columbia. Included are such data as enrollment estimates in home economics, the proportion of required and elective courses in schools located in communities of different sizes, the number of years home economics is offered in the various secondary schools, the number of periods per week courses are taught in grades 7 through 12, and some information about content of courses. Estimates are also given on the number of home economics teachers, and the approximate number of secondary schools in which home economics education for adults is a part of the program. Some of these data have been studied according to geographic region, and certain comparisons of the offerings in vocational and nonvocational home economics programs have been made. The complete report of the study which will be issued later will include a variety of analyses of these data, and, for some aspects of the study, statistics for each state.

Home Economics in Degree-Granting Institutions, 1959-60, a U. S. Office of Education publication, OE-83008-60 (Misc. 2557-Rev. 1960), is now available without charge from the Office of Education, Department of Health, Education, and Welfare, Washington 25, D. C.

This 85-page publication, the seventh in a series of surveys conducted biennially by the Home Economics Education Branch for the purpose of determining the status of home economics in degree-granting institutions throughout the United States, Puerto Rico, and the District of Columbia, is based on data reported in the fall of 1959 by 438 institutions of higher education. The findings from the survey indicate that in the fall of 1959 approximately 77,730 students were enrolled in home economics in degree-granting institutions, and that during the academic year 1958-59, a total of 9,935 degrees were granted to home economics majors in 430 of the 438 institutions reporting. Of the total degrees granted, 8,082 were bachelor's, 804 were master's, and 49 were doctor's.

This publication contains such information as home economics enrollment in colleges and universities, size of faculty, courses taught, minimum requirements for a bachelor's degree with a major in home economics, and the vocational fields for which graduates with a bachelor's degree in home economics are prepared. Persons responsible for administering home economics programs, guidance counselors, research workers, and others who may have need for facts and figures about home economics degree-granting programs in the United States will find the data helpful.

Determining Requirements for Development of Technical Abilities through Extension Courses, 1961, a U. S. Office of Education publication, O.E. 80010, is now available without charge from the Office of Education, Department of Health, Education and Welfare, Washington 25, D. C.

This 14-page pamphlet was prepared by the Area Vocational Education Branch to suggest procedures and techniques to help educators and industry organize and develop extension training courses designed to provide technical and scientific education which will increase the effectiveness of workers and provide the flexibility needed to meet the rapidly changing conditions brought about by technological developments. It includes suggestions for: (1) determining the characteristics or elements of jobs requiring scientific and technical education and of jobs clearly related to them; (2) determining the degree of similarity among related jobs and the common worker qualifications required for successful job performance; (3) delineating the areas in which extension training should be given in order to prepare workers to perform the duties of a specific job; and (4) organizing extension or supplementary training designed to update workers to meet technological advances in their occupations.

International Harvester Company has just released a new booklet which should be a boon to young farmers seeking to practice good soil and water conservation.

The publication was developed through the cooperation and assistance of the United States Department of Agriculture Soil Conservation Service and representatives of the National Association of Soil Conservation Districts.

The soil and water conservation story unrolls in 24 illustrated pages with tips on how to start a conservation program and how it can pay off. The advantage of contour farming, strip cropping, terracing, and others are brought to light and explained. The booklet even contains a "do-it-yourself" section on soil conservation.

Farmers seeking to boost yields and cut costs can procure profitable information by obtaining the booklet *Soil and Water Conservation Pays Dividends* from their local International Harvester farm equipment dealers.

Physical Distribution Management by Smykay, Bowersox and Mossman, The Macmillan Company, 1961, 283 pages, $8.00. This book offers concrete quantitative analyses of the problems of physical distribution and suggests steps a firm may take to be sure the right quantities are in the right place and the right time. It contains check lists to select the most efficient and economical mode of transportation, it discusses spatial arrangement for plant and warehouse, and covers cost analysis, location analysis, sales forecasting, inventory control, rate structure, and size limitations. Smykay and Mossman are both with the Department of Marketing and Transportation Administration, Michigan State University. Bowersox is with the Railway Express Agency.

Engineering-Technical Drafting and Graphics, by Giachino and Beukema (both of Western Michigan University), American Technical Society, 1961, 778 pages, $9.75. The purpose of this book is to present an overview of the significant fields of drafting with practices currently recognized by industry, and basic graphical forms of representation which are needed by students of engineering and technology. It is designed to develop in the student the ability to solve engineering problems, create design requirements and convey engineering ideas. This book is based on the results of an extensive study of the drafting techniques employed in a variety of industrial and engineering drafting departments of 250 companies. It also includes the latest drafting standards published to date by the various standardizing agencies. Considerable attention has been given to the drafting problems included at the end of each section. Many of these problems represent actual products manufactured by industries. To avoid copywork as much as possible the problems frequently require a certain amount of design effort. In some instances dimensions have been purposely omitted to stimulate design imagination.

Sheet Metal Drafting by Melvin L. Betterley, McGraw-Hill Book Company, 1961, 314 pages, $6.50. This book was written for draftsmen so has omitted information on metals, machines, processes, and other related subjects which do not have direct bearing on drafting *per se*. Designed for courses in technical institutes, trade and vocational schools, and adult classes, this text should also be valuable for apprentice and industrial training programs. It is not, the author points out, a mere collection of problems and their solutions: it concentrates on basic principles which can be applied to various situations as they arise. This, then, is a basic book—for students who find themselves seeking supplementary training beyond their basic skills.

Semiconductor Devices by Rufus P. Turner, Holt, Rinehart & Winston are the publishers. The book sells for $5.56, contains

278 pages, and was published in 1961. Says author Turner, a registered professional engineer, "Modern electronics is, to a large extent, semiconductor electronics. What we have come to call the space age is so dependent on semiconductor devices of all kinds that we must wonder if it could have been reached without them." Turner adds that to his knowledge this is the first book devoted to the entire subject of these devices. The text is a survey of these devices—descriptions, theory, applications. It devotes no space to basic electronic theory since the reader presumably has fundamental knowledge before he embarks on this compendium.

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A new 68-page power tool catalog has been announced by Skil Corporation, Chicago. The catalog contains complete information on over 100 Skil Power Tools for use in industry, construction, automotive service, vocational training, maintenance and other applications. Included are over two hundred illustrations, information on product features and applications and complete specifications. Skil power saws featured in the catalog include three new Skilsaw worm-drive power saws, a new 6½" top handle model, a new two speed metal-cutting power hacksaw, improved all-purpose (wood, plastic and metal-cutting) reciprocating saw and a new heavy-duty jig saw with two speeds for fast cutting of both wood and metal. Copies of the catalog may be obtained by writing to Skil Corporation, 5033 Elston Avenue, Chicago 30, Illinois.

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A new eight-page, illustrated bulletin describing the recently introduced Delta 12-inch cut-off machine is now available from Rockwell Manufacturing Company's Delta Power Tool Division.

The bulletin describes the four cost-saving machines to choose from—for dry abrasive cutting, for wet abrasive cutting, for non-ferrous cutting and for wood cutting. Operational photographs describe the precision engineered features that save production time and promote operating economy. The bulletin also includes specifications, catalog listings, and listings of all motors and motor controls and accessories.

For address, see back cover.

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Wedge bed construction, combining accuracy with easy adjustment, and a separate feed drive motor are featured on a new 18-inch planer introduced by Rockwell Manufacturing Company's Delta Power Tool Division.

In addition to increasing accuracy and simplifying adjustment, wedge bed construction provides greater work support than conventional raising screws. The incline ways directing the even rise of the bed are supported by a large area of solid metal that serves as a compression member, eliminating bending or tension strain on any part. The planer's separate feed drive motor provides a variable feed range of 15 to 36 feet per minute. Since the feed mechanism is not driven from the cutterhead, many extra parts are eliminated.

There is no clutch on the planer. Instead, the separate feed drive motor and the head motor are electrically interlocked so that a single stop button stops both faster than an operator could disengage a clutch and turn off the power.

The new unit handles stock up to 18 inches wide and from ⅛-inch to 6 inches thick. Depth of cut is limited to ¼-inch as a safety factor to eliminate any possibility of an operator's fingers being caught between the girt and stock being fed.

RESEARCH

Voters and Their Schools, William R. O'Dell, Project Director, Stanford University, Palo Alto, California. Cooperative Research Project No. 308, U. S. Office of Education, 1960.

Most of the research report is concerned with these two questions:

1. What voters, under what conditions, have favorable attitudes toward schools?
2. What voters, under what conditions, participate in school affairs?

Interviews with over 5,000 registered voters, community leaders and school staff members, plus mail questionnaires distributed to over 1,000 school districts yielded some very interesting results with regard to voter attitudes toward schools and toward school bond issues. The results affecting vocational and practical arts education included some of the following:

a. The voter feels that the *least* important tasks of the schools are to teach about the local region; to afford enjoyment of cultural activities, i.e., art and music: and to provide *industrial arts.*

b. The voter feels that the following areas are important, but he thinks that the schools are doing poorly: teaching about budgeting and use of money and properties; giving pupils knowledge of *occupational* opportunities; providing psychological guidance; and providing *vocational education for industry.*

c. The most favorable voter is the young voter with a child of school age who has recently become a resident in the community and who is in a *skilled occupation or in clerical or sales work.* The most unfavorable voter is the young voter without children who is a long-time resident of the community (and undoubtedly went to school there) and whose occupation is professional or *technical.*

d. The least critical voter is the parent of a child in public school. The most critical voter is without children or has children in private school. The public school parent is critical only in a few areas, those of *occupational* and college preparation.

Two-thirds of the voters would like to turn to a school official about information about the schools, but only one-third name a school official as a person they know who seems to be well informed on school affairs.

The extensive study can be of great value to any educator who is concerned with voter attitudes toward the schools.

This report was prepared from a review of "Voters and Their Schools," which appeared in the March, 1961, issue of *Phi Delta Kappa.*

Minnesota Conference

The annual conference of the Minnesota Home Economics Teachers will be held August 21-25, 1961 on the St. Paul Campus of the University of Minnesota. The conference is sponsored by the Minnesota State Department of Education in cooperation with the School of Home Economics of the University of Minnesota.

"Is Your Concept of Home Economics Up to Date?" is the theme of the conference. Dr. Julia Dalrymple, Chairman, Department of Home Economics Education, University of Wisconsin, has been selected as conference leader.

In addition to lectures, discussion groups, and interest-work groups, this year's conference will devote one day each to the Future Homemakers of America and Adult Education workshops.

Precision Dial Indicator

Two new super precision dial indicators introduced by The L. S. Starrett Company, Athol, Massachusetts, have an A.G.D. accuracy of plus or minus .0005″ for the .015″ total range (2½ turns). Starrett No. 25-109 is a balanced dial indicator with a range of 0-3-0, one revolution .006″, total range .015″. Starrett No. 25-209 is a continuous dial model, reading 0-6, one revolution .006″, total range .015″. Both indicators are furnished with jeweled bearings.

Write The L. S. Starrett Company, Athol, Mass.

Fashion Film

The International Ladies' Garment Workers' Union announces its latest and third free 16mm. color and sound film, *Fashions, Spring-Summer 1961*. This season's film focuses on fresh, up-to-the-minute ideas for spring and summer wardrobes. It highlights a wide range of fashions for all occasions and budgets. New colors, new fabrics, "happy colored" rainwear, new shapes and the world of knitwear are shown. Commentary takes the viewer on a fashion trip which includes a look at the seldom-seen steps in the creation of "knits" from yarn through the finished garment. The film may be booked by contacting Modern Talking Picture Service, Inc., 3 East 54th Street, New York, N. Y.

Communications Device

A training device called the "Communimeter," which demonstrates failures in communication, has been developed by Mr. Kirk Jonas of the Texas Engineering Extension Service. This device, a compact metal box with ten adjustable controls, is used in supervisory training to demonstrate graphically to students that they are not able to communicate as well as they think they can. One trainee operates the equipment, and receives instruction from a second trainee. All that he has to do is set the ten controls in proper position, but in thousands of trials, no one has been able to communicate accurately enough to get the job done until he has received special training in how to communicate.

Articles describing the Communimeter have appeared in the *Journal of the American Society of Training Directors, Machine Design,* and the Conference Report of the Eleventh Annual Conference of Training Directors at Cornell University.

Further information can be obtained from Mr. Jonas at Box 236 F. E., College Station, Texas.

> "Educated people must labor. Otherwise, education itself would become a positive and intolerable evil. No country can sustain in idleness more than a small percentage of its numbers. The great majority must labor at something productive. From these premises the problem springs: how can labor and education be the most satisfactorily combined?"
>
> —*Abraham Lincoln*

Printers to Study Abroad

The Education Council of the Graphic Arts Industry has arranged for its managing director, Samuel N. Burt, to conduct a study of England's technical education and training programs for the printing industry. Mr. Burt will leave for England on June 11, and he will visit London School of Printing, the Manchester College of Science and Technology, Harpenden Printing Technical School, Bristol School of Printing, Birmingham College School of Printing, and others.

The decision to conduct this technical education study was prompted by the request of the International Graphic Arts Education Association. For the past three years, the I.G.A.E.A. has been concerned with the development of technical education programs for the printing industry in post-high school institutions—the junior colleges, area vocational-technical schools, technical institutes and community colleges. These institutions—offering 2 year post-high school terminal programs either to develop high level vocational skills or to prepare for further college education—have been characterized as the fastest growing phase of education in the United States. Some of these schools have established printing education programs and many more are seeking advice from both the I.G.A.E.A. and the Education Council in establishing such programs. Since England has been conducting such programs for many years, the Education Council decided to study the programs in England so that the printing industry and the printing teachers in the United States could have the benefit of this experience in developing our own programs.

Printing Conference

The International Graphic Arts Educational Association will hold its 36th annual conference on printing education at the Ferris Institute, Big Rapids, Mich., July 30 to August 4. Theme of the five-day conference is "Technical Education for the Printing Industry.

The professional phase of the meeting will explore technical education programs for the printing industry as they are being developed in both two-year and four-year college programs, vocational schools and technical institutes. Training in the use of instrumentation, preparation of students for administrative and production technicians, and engineer positions will be discussed. New courses in mathematics, physics, and chemistry for the printing industry will be presented.

Role of Marketing, Distribution Explained

Survival of the American economy and preservation of the values of American capitalism will depend largely upon the leadership and creative outlook of those engaged in marketing and distribution. Developing understanding of the contributions of marketing and distribution to the American economy is one of the greatest challenges to distributive educators, according to John A. Beaumont, speaking to participants in the Pacific Regional Conference on Distributive Education in Boise, Idaho, March 13-17.

In speaking of directions for distributive education Mr. Beaumont stressed importance of providing opportunity for preparatory teacher education in each State.

At the conference conducted by Mary V. Marks, Program Specialist, members analyzed their activities in terms of economic projections, supervisory practices, and increasing requests for education for distribution. Selected supervisory leadership activities to be emphasized were listed and guidelines to be set up for administrative planning were proposed.

A survey of research being conducted, and procedures for sharing the findings, was planned. Wider investigation of practices in the instructional program and in administration is proposed as a first step n program development.

Enlightened leadership is the goal of an expanded program of teacher education. Teacher coordinators will be encouraged to refresh their knowledge in the content of economics and marketing as well as to broaden their professional concepts and skills.

Will he ever save the down payment? He'll be in his new home sooner than he thinks, if he saves something every payday. The effortless, automatic way is the Payroll Savings Plan for U.S. Savings Bonds.

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You save more than money with U. S. Savings Bonds

20th ANNIVERSARY 1941 1961

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U.S. Helps South Korea with Skills

Robert M. Knoebel, Program Specialist, has returned to the Area Programs Branch, Vocational Division, U. S. Office of Education, after an assignment of approximately one year in Korea with the International Cooperation Administration, where he assisted with the planning for a demonstration Industrial Education Department at Seoul Technical High School. Seoul Technical High is a middle and senior high school with 1,800 students. Until the present time, it has been primarily a college preparatory institution with emphasis upon a pre-engineering curriculum centered in ten departments. The new department will consist of seven trade areas; auto mechanics, carpentry/cabinetmaking, electricity, electronics, machine shop, pattern-making and foundry. The curriculum has been designed for grades 10, 11 and 12, and has been placed into effect with the opening of the school term April 1, 1961.

The program is designed as a pilot effort to determine whether training for entrance into the skilled trades can be achieved satisfactorily in the secondary schools of Korea. If the plan proves to be acceptable, it will be extended to other selected technical schools on the peninsula in an effort to more adequately meet the urgent demands for skilled manpower in South Korea.

The planning of the program was carried on as a joint effort by the Education Ministry of the Republic of Korea, the Seoul Board of Education and the Vocational Branch of the United States Operations Mission to Korea. Equipment for the shops has been provided with United States foreign aid funds.

AEC and USOE Promote Training with Radioactive Materials

The use of radioactive materials for the good of mankind is not without some hazard to the American people. More and more radioactive materials are being handled in all sections of the country—in industrial production, in research, and in medical diagnosis and treatment, as well as in the military. The transportation of radioactive materials by common carriers over land and water and by air adds to the possibility of emergencies involving radiation hazards. This points up the need for an increasing number of qualified persons who can handle such emergencies.

Recognizing the importance of training firemen and other emergency personnel, both the Atomic Energy Commission and trade and industrial educators in most states have been working in this area for a number of years. The Atomic Energy Commission has made available a limited amount of direct instruction to fire departments. Training programs for firemen have been conducted under the auspices of trade and industrial education for a long time. It is logical, therefore that the Atomic Energy Commission and the Trade and Industrial Education Branch of the U. S. Office of Education, have joined forces in promoting special training in the handling of radioactive materials and in providing assistance through the preparation of training manuals.

Two companion publications — an instructor's guide and a student's manual — entitled, *Peacetime Radiation Hazards in the Fire Service—Orientation Unit,* have just been released by the Office of Education. Merle E. Strong, Specialist, Teacher Training and Service Studies, served as coordinator of the project.

The manuals constitute a four-hour orientation type of training program for firemen and other emergency personnel in handling radioactive materials. In process of completion is a 12-15 hour basic course, including a resource manual, an instructor's guide, a study guide, and teaching charts, which should be available this summer. All of these publications grew out of the recommendations of a national committee composed of state supervisors of trade and industrial education, fireman trainers, and representatives of the Atomic Energy Commission, Office of Civil and Defense Mobilization, and the U. S. Office of Education.

The Atomic Energy Commission will provide instruction in the technical aspects of handling radioactive materials in training programs for instructors.

On the occasion of his retirement as State Director of Vocational Education in Georgia, George I. Martin was honored at the annual Georgia Vocational Breakfast and presented with a new pick-up truck to use on his farm in Sylvester. Mr. Martin above receives keys to the truck from Mrs. Ellen B. Coody, GVA President.

Department of Health, Education, and Welfare
Washington 25, D. C.
OFFICE OF THE COMMISSIONER OF EDUCATION

April 5, 1961

Dear Mr. Mobley:

Thank you for your letter of congratulations on my appointment as U. S. Commissioner of Education. Since I feel very strongly that vocational education is an area of high priority for the Office of Education, I particularly welcomed your good wishes.

I know that the Office of Education and the American Vocational Association have worked closely in the past, and I trust that this relationship will continue and mature in the future.

Thank you again for your thoughtful note.

Sincerely yours,

Sterling M. McMurrin

Sterling M. McMurrin

Mr. M. D. Mobley
Executive Secretary
American Vocational Association, Inc.
1010 Vermont Avenue, N.W.
Washington 5, D. C.